

FIG. 1

FIG. 2

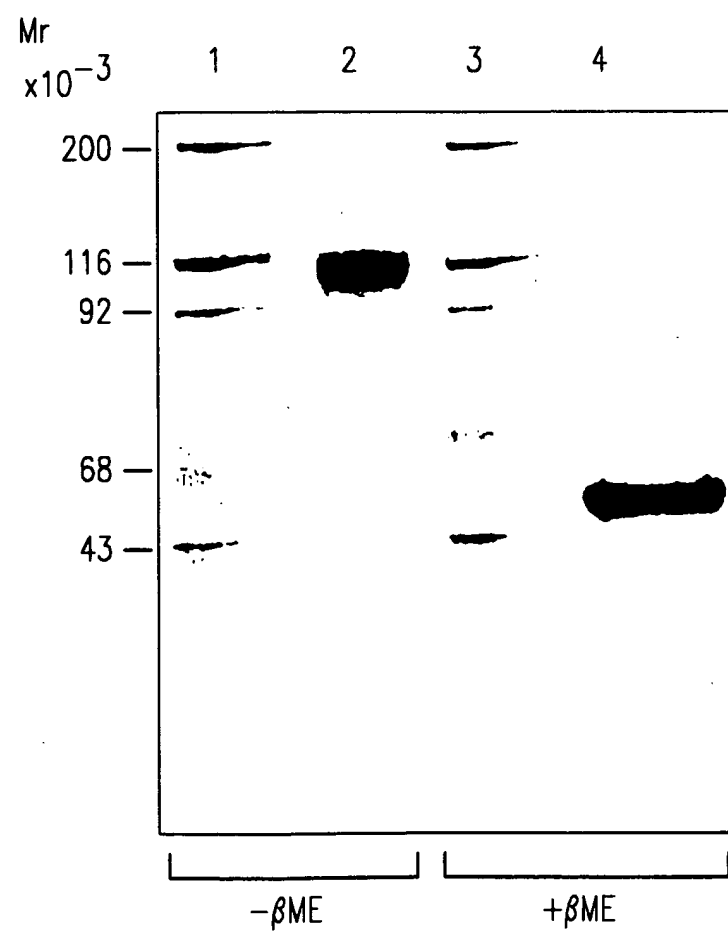


FIG. 3

⁻²⁶
M G V L L T Q R T L L S L V L
ATG GGT GTA CTG CTC ACA CAG AGG ACG CTG CTC AGT CTG GTC CTT 45

A L L F P S M A S M A ⁻¹ ⁺¹ M H V A
GCA CTC CTG TTT CCA AGC ATG GCG AGC ATG GCA ATG CAG GTG GCC 90

⁺¹⁰
Q P A V V L A S S R G I A S F
CAG CCT GCT GTG GTA CTG GCC AGC AGC CGA GGC ATC GCC AGC TTT 135

⁺²⁰ ⁺³⁰
V C E Y A S P G K A T E V R V
GTG TGT GAG TAT GCA TCT CCA GGC AAA GCC ACT GAG GTC CGG GTG 180

⁺⁴⁰
T V L R Q A D S Q V T E V C A
ACA GTG CTT CGG CAG GCT GAC AGC CAG GTG ACT GAA GTC TGT GCG 225

⁺⁵⁰ ⁺⁶⁰
A T Y M M G N E L T F L D D S
GCA ACC TAC ATG ATG GGG AAT GAG TTG ACC TTC CTA GAT GAT TCC 270

⁺⁷⁰
I C T G T S S G N Q V N L T I
ATC TGC ACG GGC ACC TCC AGT GGA AAT CAA GTG AAC CTC ACT ATC 315

⁺⁸⁰ ⁺⁹⁰
Q G L R A M D T G L Y I C K V
CAA GGA CTG AGG GCC ATG GAC ACG GGA CTC TAC ATC TGC AAG GTG 360

GLYCOSYLATION SITE
⁺¹⁰⁰
E L M Y P P P Y Y L G I G N G
GAG CTC ATG TAC CCA CCG CCA TAC TAC CTG GGC ATA GGC AAC GGA 405

⁺¹¹⁰ ⁺¹²⁰
T Q I Y V I D P E P C P D S D
ACC CAG ATT TAT GTG ATT GAT CCA GAA CCG TGC CCA GAT TCT GAC 450

⁺¹³⁰
F L L W I L A A V S S G L F F
TTC CTC CTC TGG ATC CTT GCA GCA GTT AGT TCG GGG TTG TTT TTT 495

⁺¹⁴⁰ ⁺¹⁵⁰
Y S F L L T A V S L S K M L K
TAT AGC TTT CTC CTC ACA GCT GTT TCT TTG AGC AAA ATG CTA AAG 540

⁺¹⁶⁰
K R S P L T T G V Y V K M P P
AAA AGA AGC CCT CTT ACA ACA GGG GTC TAT GTG AAA ATG CCC CCA 585

⁺¹⁷⁰ ⁺¹⁸⁰
T E P E C E K Q F Q P Y F I P
ACA GAG CCA GAA TGT GAA AAG CAA TTT CAG CCT TAT TTT ATT CCC 630

I N
ATC AAT 636

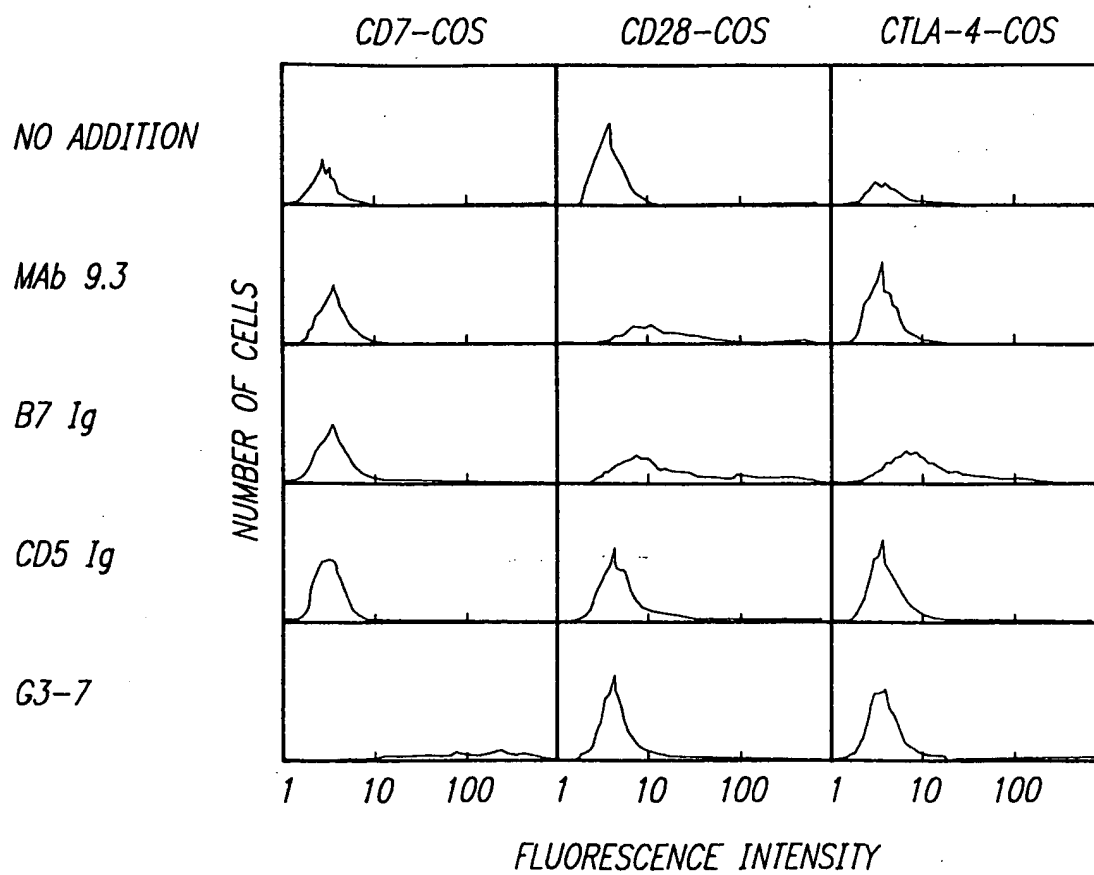


FIG. 4

FIG. 5

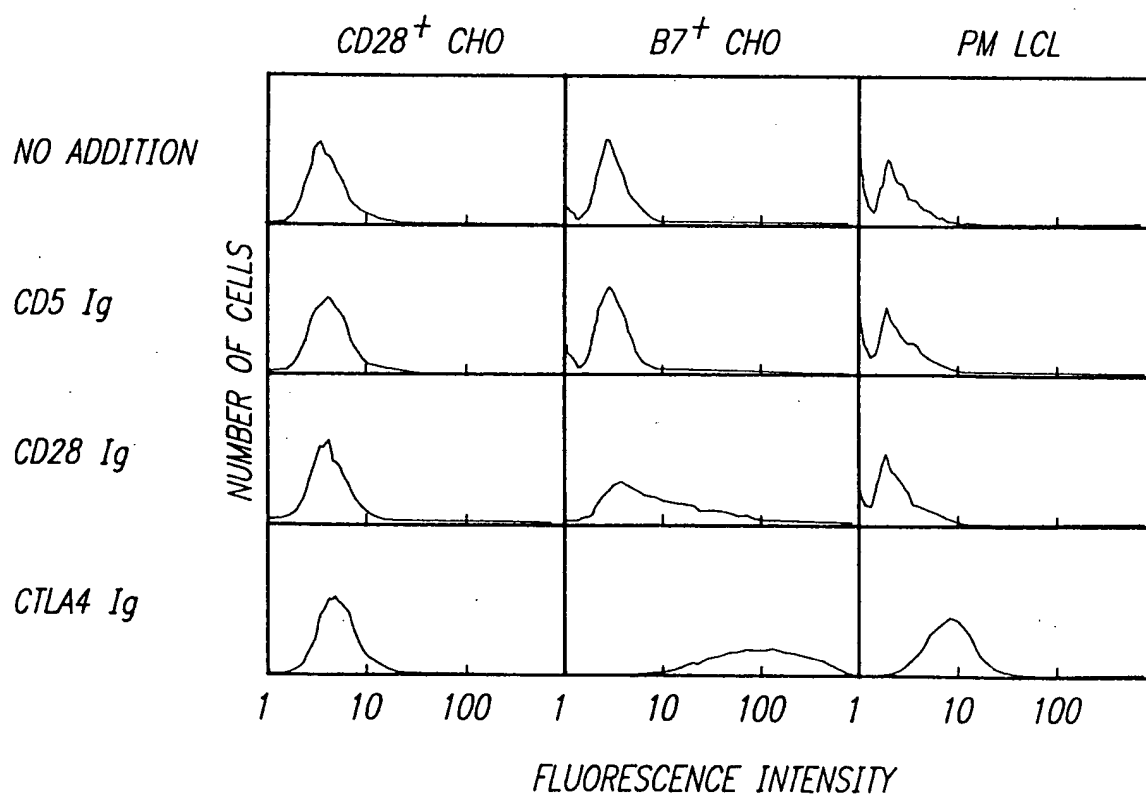


FIG. 6

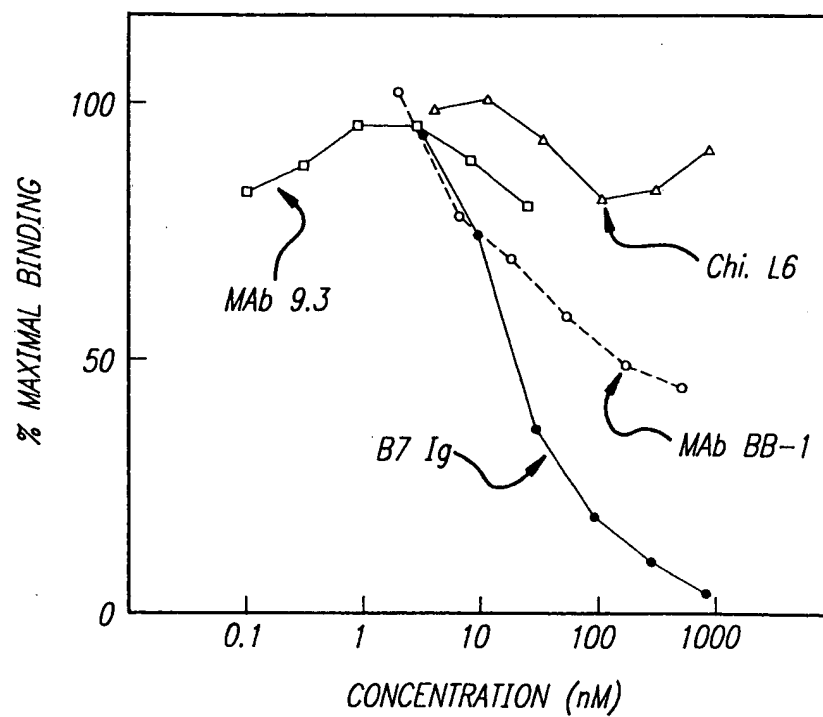


FIG. 7

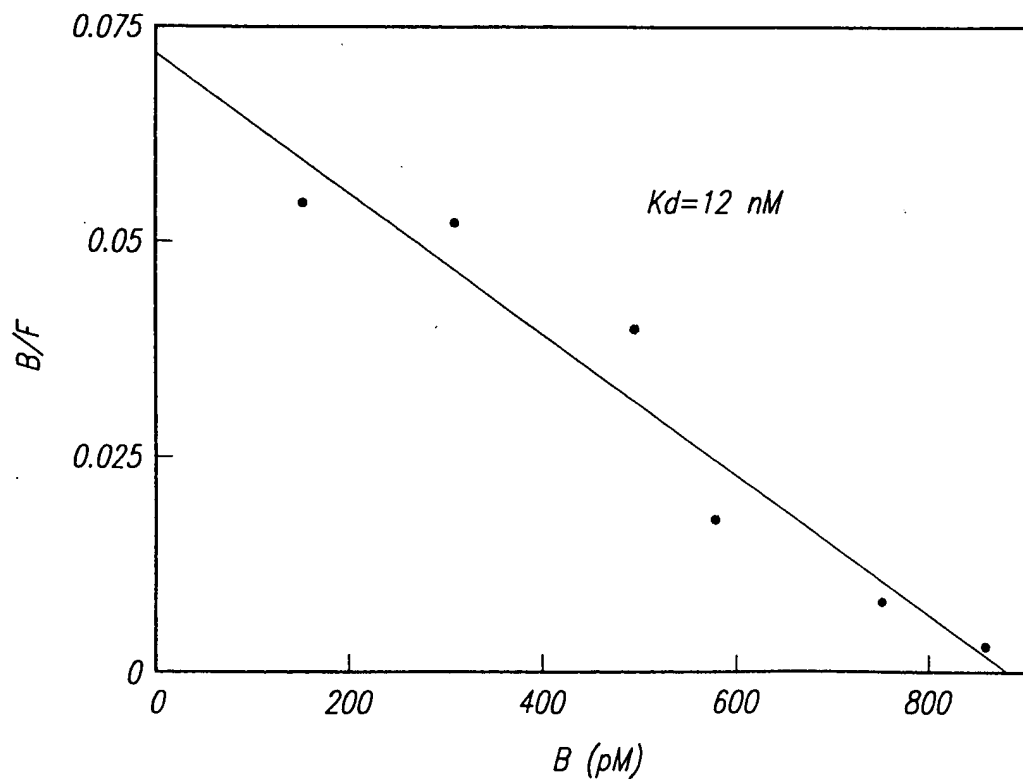


FIG. 8

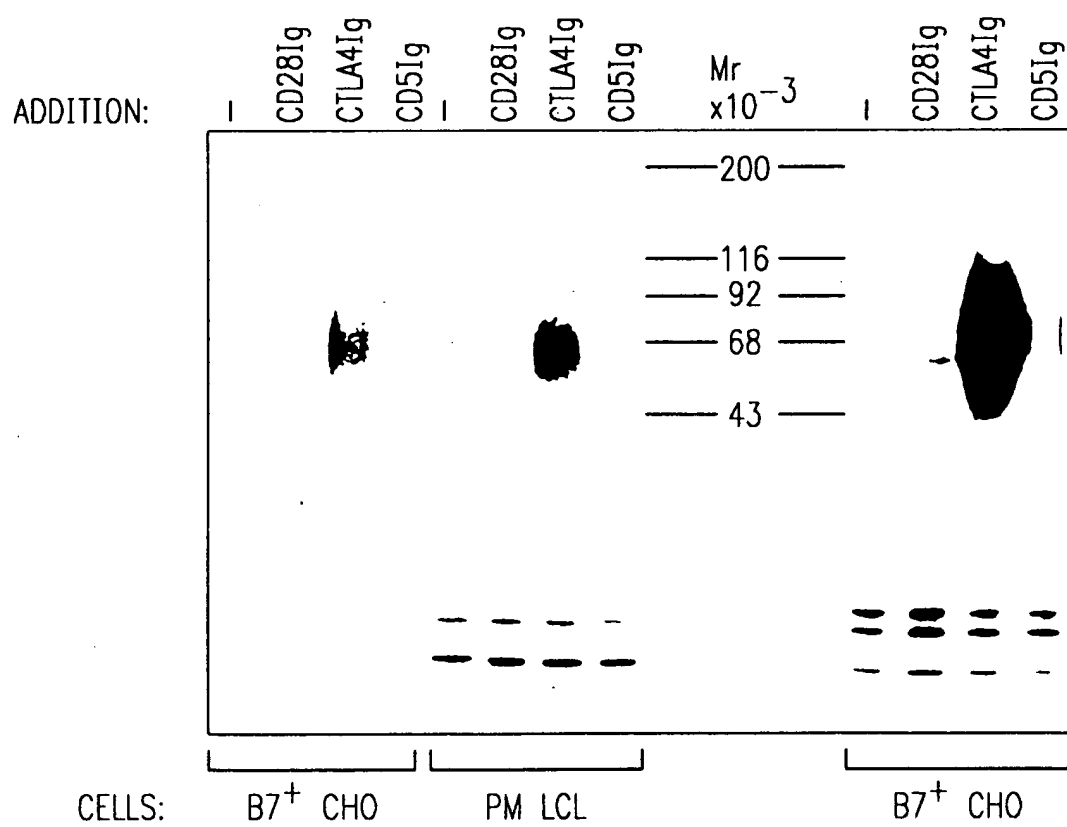


FIG. 9

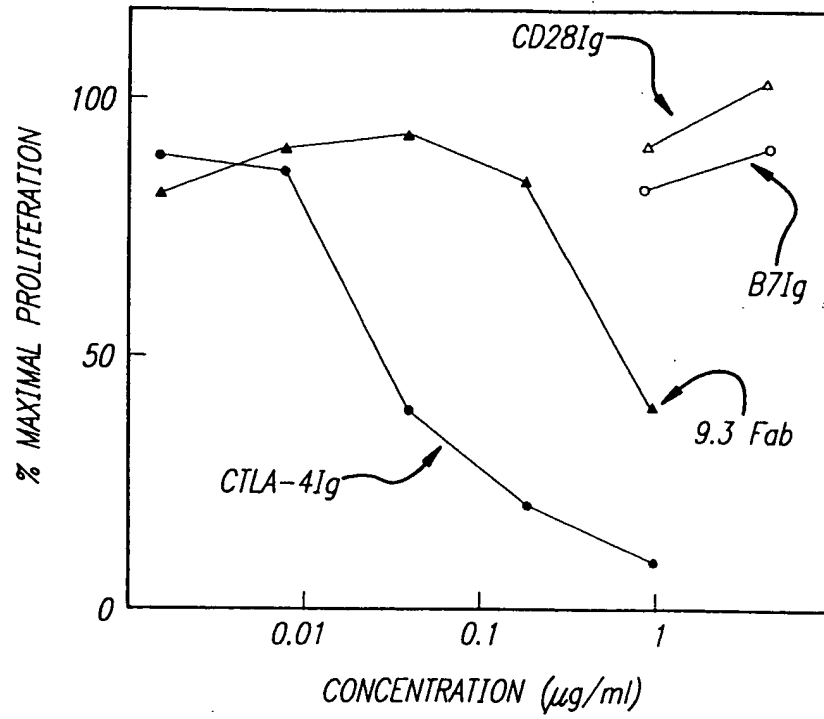


FIG. 10

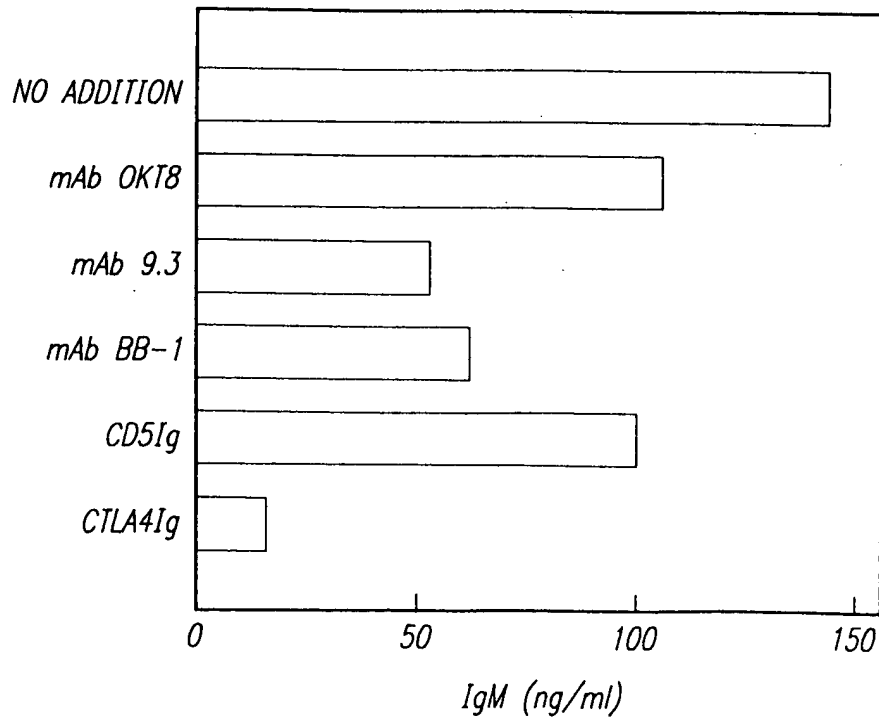


FIG. 11A

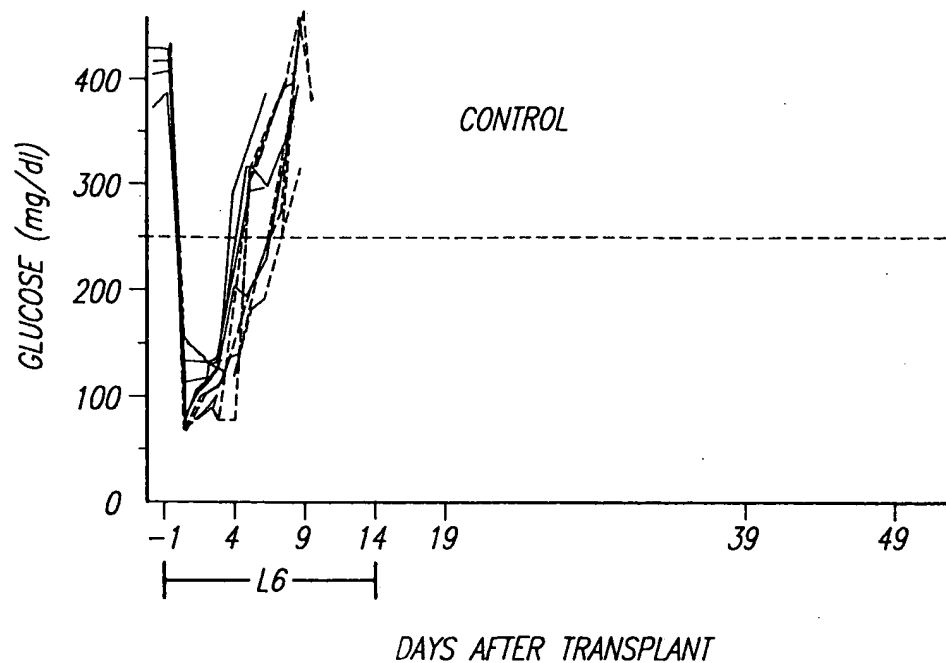


FIG. 11B

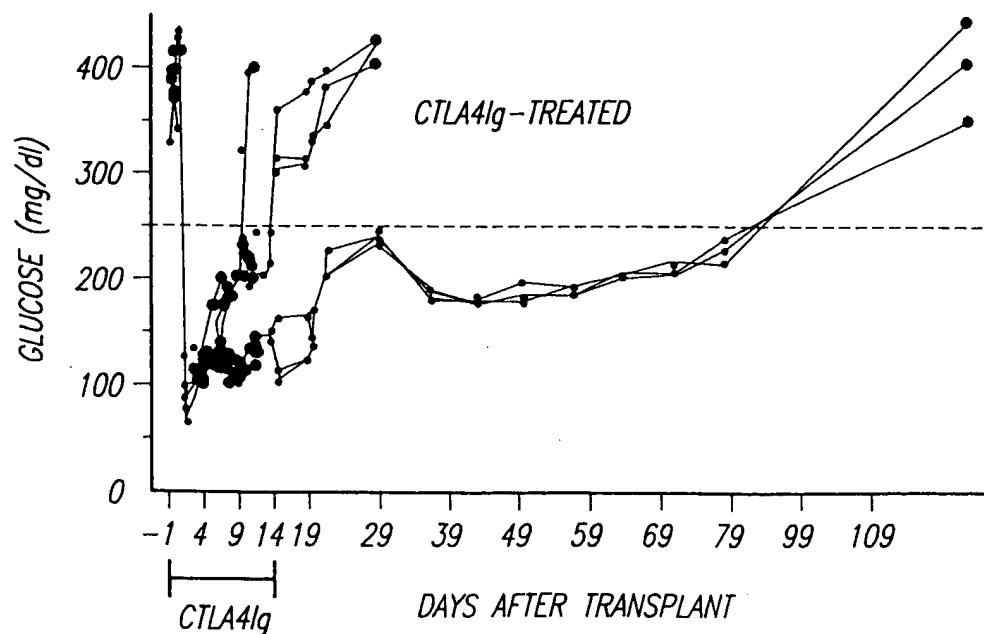


FIG. 11C

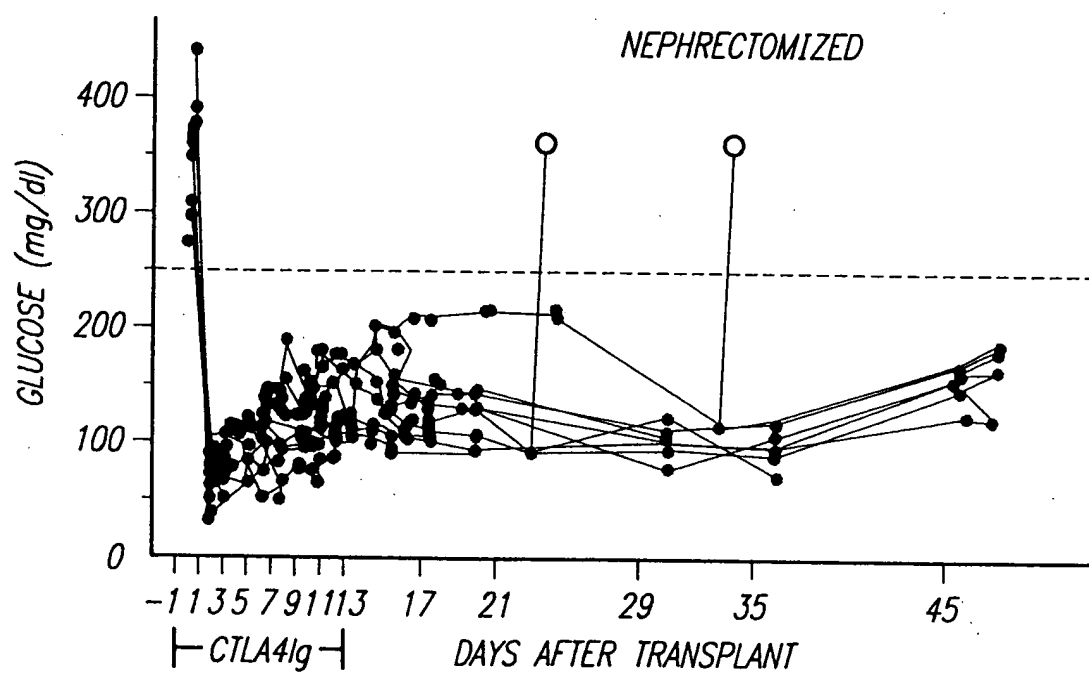


FIG. 12

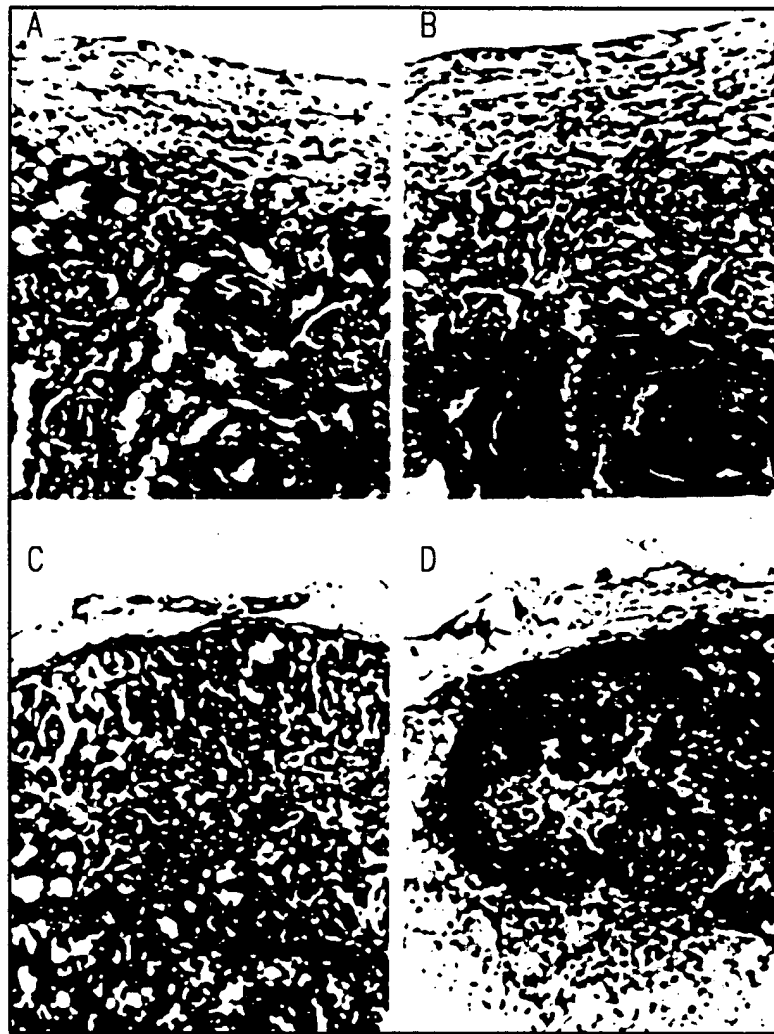


FIG. 13

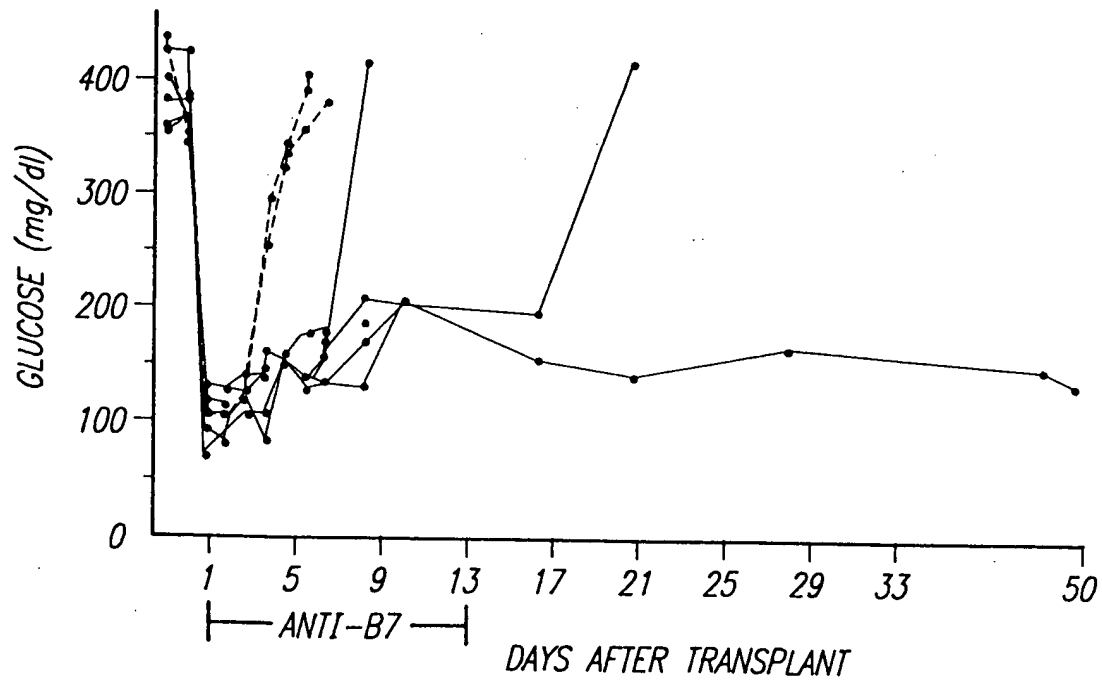
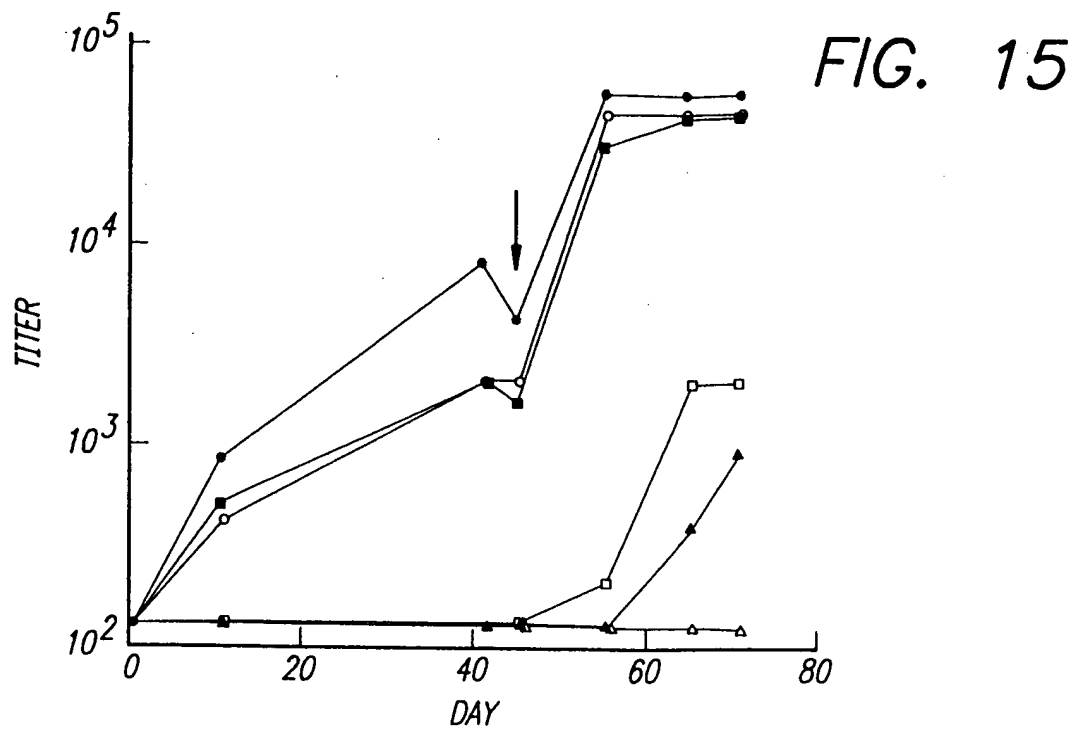


FIG. 14

GLUCOSE (mg/dl)

DAYS AFTER INITIAL TRANSPLANT

| Days After Initial Transplant | Normal (mg/dl) | 100 mg/kg (mg/dl) | 200 mg/kg (mg/dl) |
|-------------------------------|----------------|-------------------|-------------------|
| 0 | 380 | 350 | 280 |
| 1 | 360 | 100 | 100 |
| 2 | 100 | 50 | 100 |
| 3 | 140 | 120 | 120 |
| 13 | 170 | 130 | 130 |
| 42 | 180 | 130 | 130 |
| 44 | 170 | 130 | 130 |
| 46 | 150 | 130 | 130 |
| 48 | 140 | 130 | 130 |
| 49 | 140 | 130 | 130 |
| 50 | 140 | 130 | 130 |
| 52 | 150 | 130 | 130 |
| 54 | 140 | 130 | 130 |
| 57 | 120 | 100 | 100 |
| 61 | 130 | 110 | 110 |
| 69 | 100 | 100 | 100 |
| 82 | 110 | 80 | 80 |
| 90 | 100 | 100 | 100 |
| 95 | 100 | 70 | 70 |



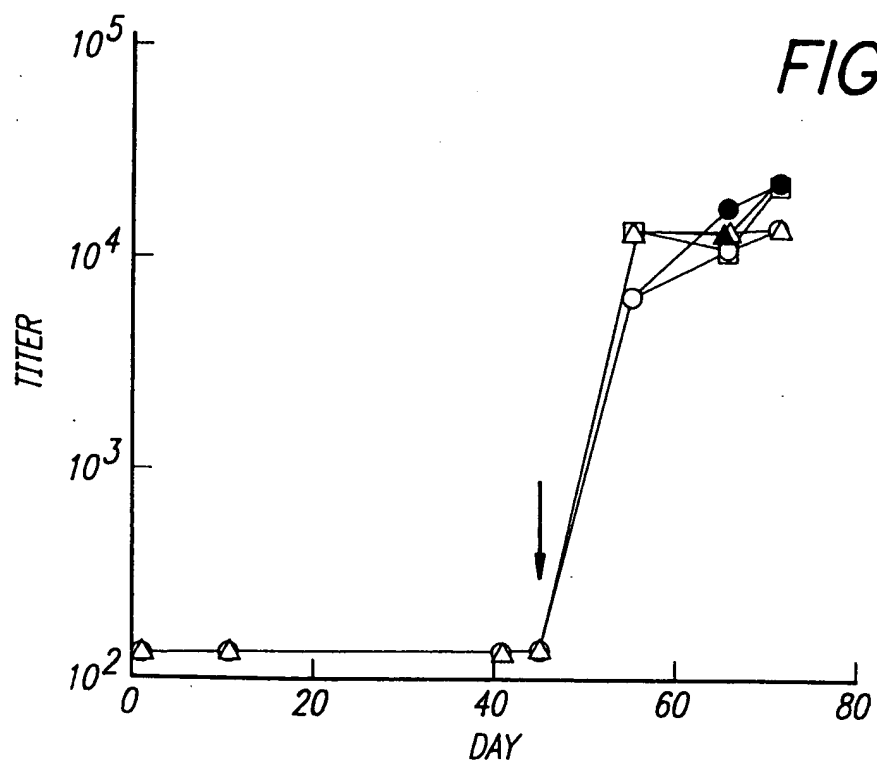


FIG. 17-A

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M | A | C | L | G | F | O | R | H | K | A | Q | L | N | L | A | A | R | T | W | P | C | T | L | L | F | F | L | L | F | I | P | V | F | C | K | A | N | | | | | | | | | | |
| Hct1a4 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | | | | | | | | | | | |
| Muct1a4 | M | A | C | L | G | L | R | R | Y | K | A | Q | L | Q | L | P | S | R | T | W | P | F | V | A | L | L | T | L | L | F | I | P | V | F | S | E | A | I | | | | | | | | | | |
| Mcd28 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | M | T | L | R | L | L | F | L | A | L | N | F | F | . | S | V | Q | V | T | E | N | K | I | | | | | | | | | | |
| Rcd28 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | M | T | L | R | L | L | F | L | A | L | S | F | F | . | S | V | Q | V | T | E | N | K | I | | | | | | | | | | |
| Hcd28 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | M | L | R | L | L | A | L | N | L | F | P | S | I | Q | V | T | G | N | K | I | L | V | K | Q | S | P | M | L | V | A | Y | D | |
| Chcd28 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | M | L | G | I | L | V | V | L | C | L | I | P | A | A | D | V | T | E | N | K | I | L | V | A | Q | R | P | L | L | I | V | A | N |

+1

| | signal peptide | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|----------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hct1a4 | M | A | C | L | G | F | O | R | H | K | A | Q | L | N | L | A | A | R | T | W | P | C | T | L | L | F | F | L | L | F | I | P | V | F | C | K | A | S |
| Muct1a4 | M | A | C | L | G | L | R | R | Y | K | A | Q | L | Q | L | P | S | R | T | W | P | F | V | A | L | L | T | L | L | F | I | P | V | F | S | E | A | S |
| Mcd28 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | M | T | L | R | L | L | F | L | A | L | N | F | F | . | S | V | Q | V | T | E | N | K | S |
| Rcd28 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | M | T | L | R | L | L | F | L | A | L | S | F | F | . | S | V | Q | V | T | E | N | K | S |
| Hcd28 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | M | L | R | L | L | L | A | L | N | L | F | P | S | I | Q | V | T | G | N | K | I | D | |
| Chcd28 | . | . | . | . | . | . | . | . | . | . | . | . | . | . | . | M | L | G | I | L | V | V | L | C | L | I | P | A | A | D | V | T | E | N | K | I | A | |

| | CDR 1-like | | | | | | | | | | CDR 2-like | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|------------|---|---|---|---|---|---|---|---|---|------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hct1a4 | R | G | V | A | S | F | V | P | C | E | Y | S | S | Y | N | L | L | A | K | E | T | E | V | C | A | T | T | Y | M | G | N | E | L | T | F | L | D | D | | |
| Muct1a4 | H | G | V | A | S | F | V | P | C | E | Y | S | S | Y | N | L | L | A | K | E | T | E | V | C | A | T | T | Y | M | G | N | E | L | T | F | L | D | D | | |
| Mcd28 | N | E | V | . | S | L | S | C | R | R | K | N | . | S | S | Y | N | L | L | A | K | E | T | E | V | C | A | T | T | Y | M | G | N | E | L | T | F | L | D | D |
| Rcd28 | N | E | V | . | S | L | S | C | R | R | K | N | . | S | S | Y | N | L | L | A | K | E | T | E | V | C | A | T | T | Y | M | G | N | E | L | T | F | L | D | D |
| Hcd28 | N | A | V | . | N | L | S | C | R | K | N | . | S | S | Y | N | L | L | A | K | E | T | E | V | C | A | T | T | Y | M | G | N | E | L | T | F | L | D | D | |
| Chcd28 | R | T | A | . | T | L | L | V | C | C | N | . | S | S | Y | N | L | L | A | K | E | T | E | V | C | A | T | T | Y | M | G | N | E | L | T | F | L | D | D | |

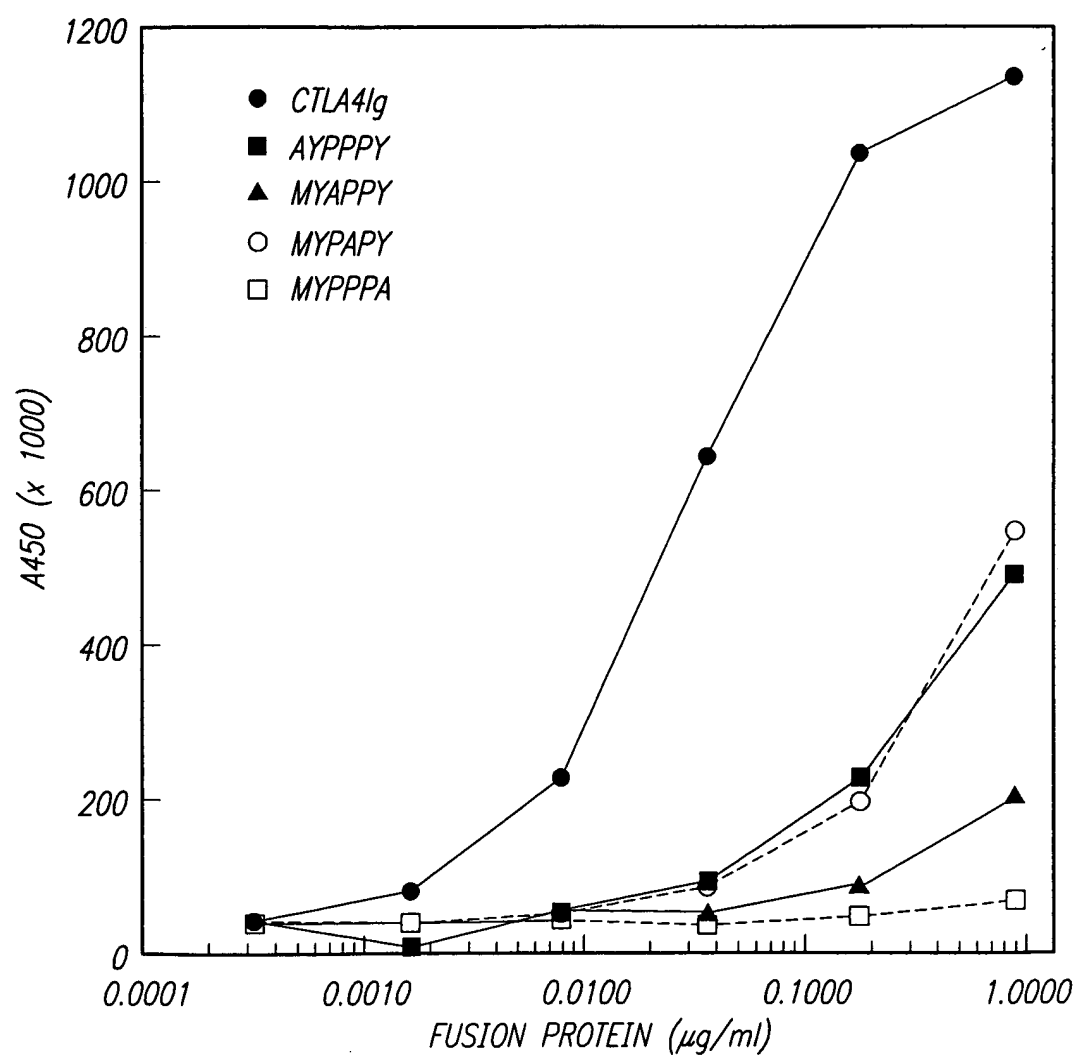
[illegible]

| | Q | Y | I | D | P | E | P | C | . | . | . | . | P | D | S | D | F | S | G | L | F | F | M | S | F | E | L | E | T | . | A | V | S | L | S | K | M | L | K | | | |
|---------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hct1a | Q | Y | I | D | P | E | P | C | . | . | . | . | P | D | S | D | F | S | G | L | F | F | M | S | F | E | L | E | T | . | A | V | S | L | S | K | M | L | K | | | |
| Muct1a4 | Q | Y | I | D | P | E | P | C | . | . | . | . | P | D | S | D | F | S | L | G | L | F | F | M | S | F | E | L | E | T | . | A | V | S | L | S | K | M | L | K | | |
| Mcd28 | I | H | I | K | E | K | H | L | C | H | T | . | . | Q | S | S | P | K | G | V | L | F | C | M | G | L | E | L | E | T | V | A | E | C | V | I | W | T | N | S | | |
| Rcd28 | I | H | I | K | E | K | H | L | C | H | A | . | . | Q | T | S | P | K | G | V | L | L | C | M | G | L | E | L | E | T | V | T | L | C | I | I | W | T | N | S | | |
| Hcd28 | I | H | I | K | G | K | H | L | C | P | S | P | L | F | P | G | P | S | K | G | V | L | A | C | M | S | G | L | E | L | E | T | V | A | E | I | I | F | W | V | R | S |
| Chcd28 | V | H | I | R | E | T | P | I | . | Q | T | Q | E | P | E | S | A | T | S | G | L | L | G | F | M | S | M | L | E | T | A | V | E | I | I | Y | R | Q | K | S | | |

Hct1a4
 Muct1a4
 Mcd28
 Rcd28
 Hcd28
 Chcd28

Hct1a4
 Muct1a4
 Mcd28
 Rcd28
 Hcd28
 Chcd28

FIG. 18



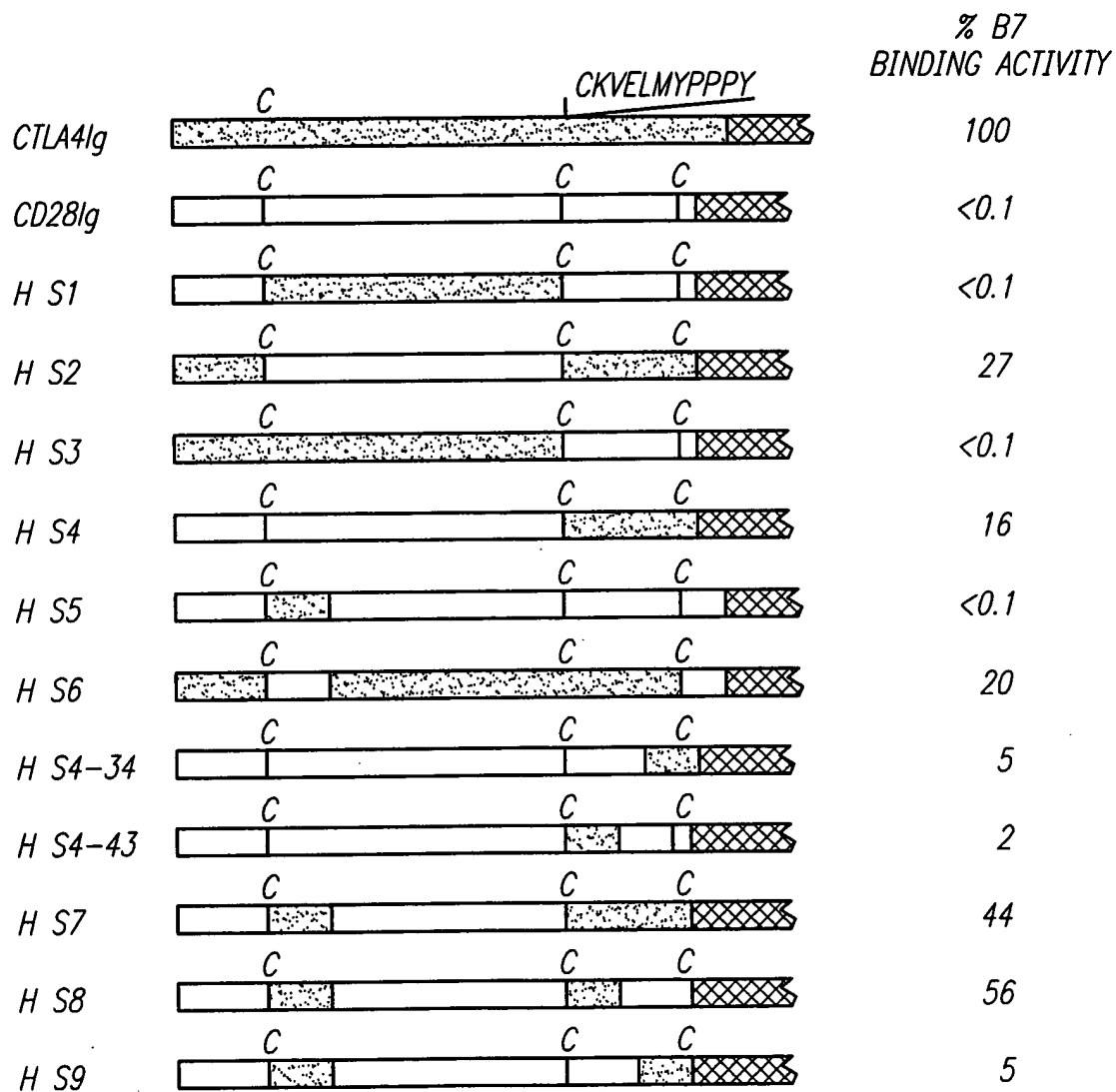
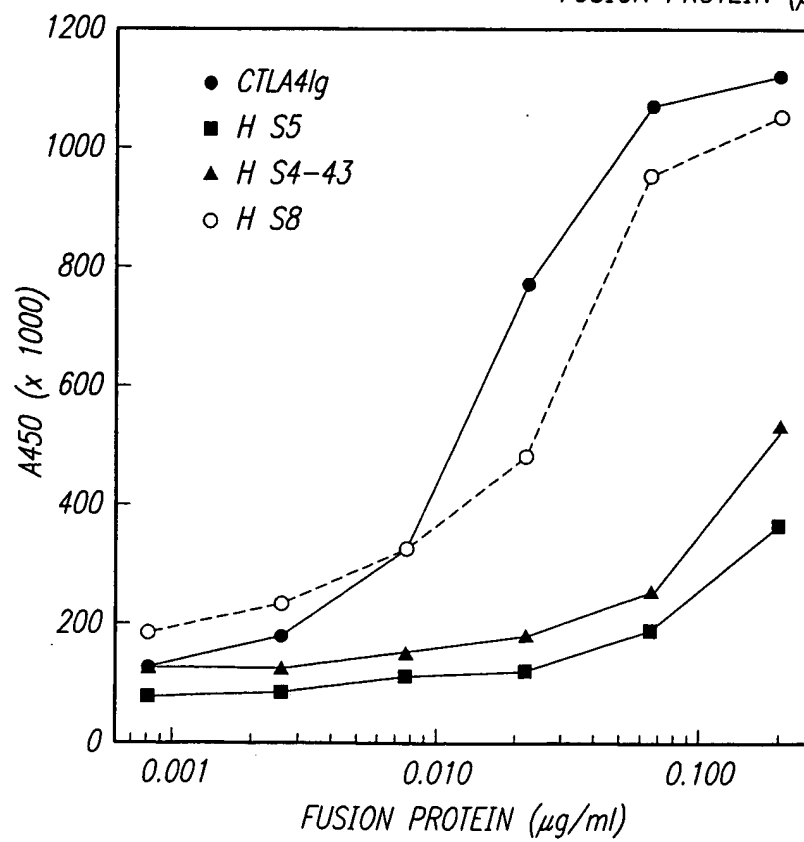
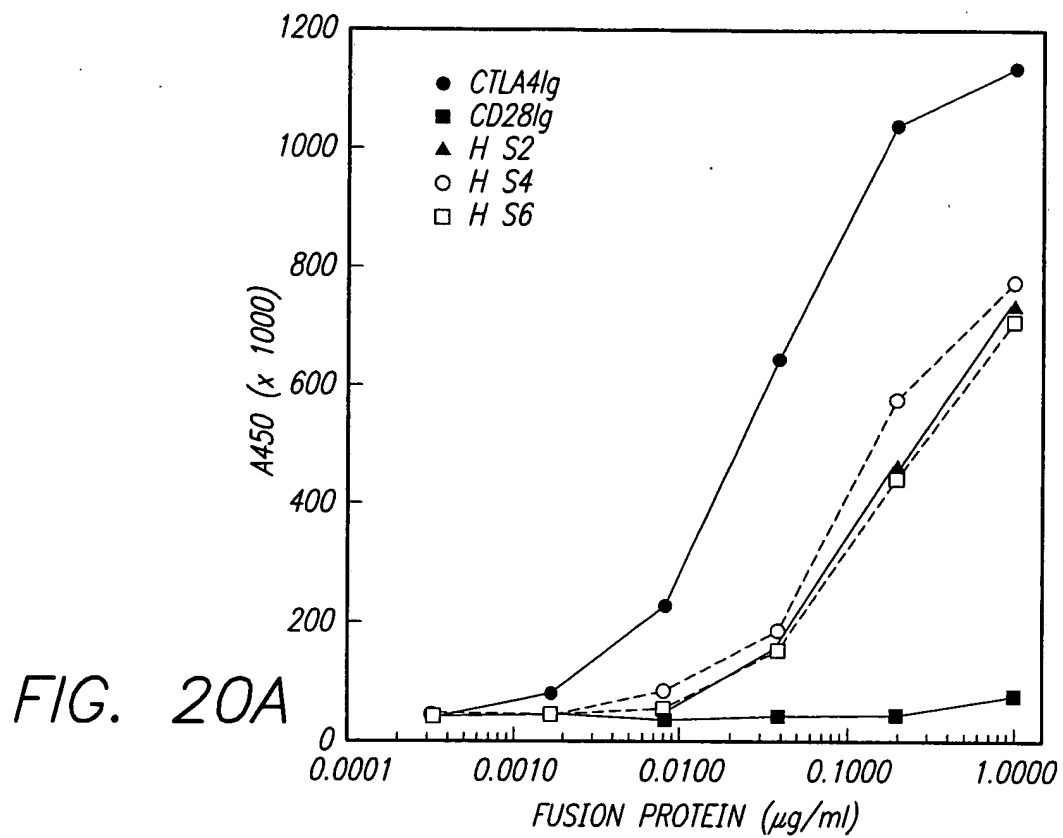


FIG. 19



CTLA-4 Model

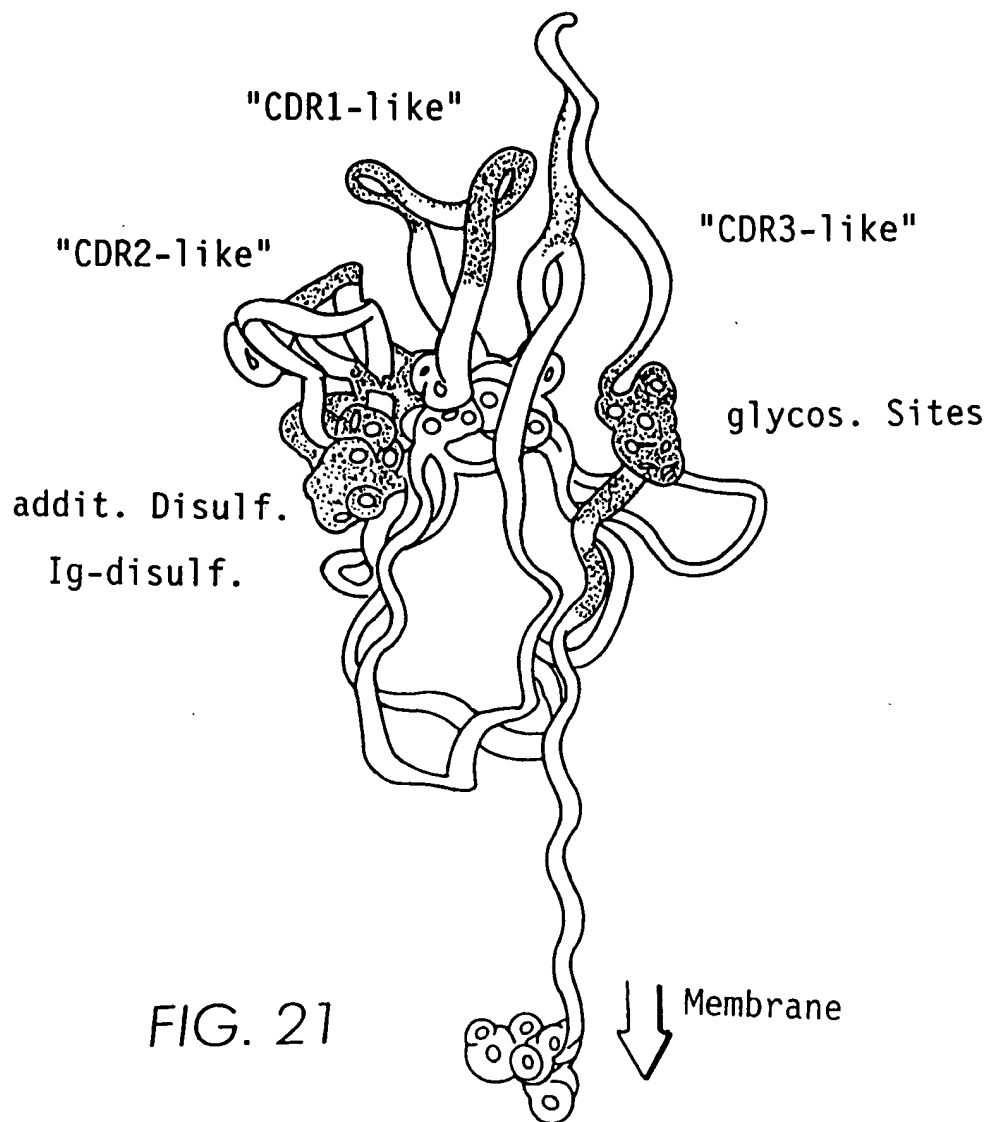


FIG. 21

| | |
|---|-------|
| ATGGGTGTACTGCTCACACAGAGGACGCTGCTCAGTCTGGTCCTTGCACTCCTGTTTCCA | -19 |
| M~~G~~V~~L~~L~~T~~Q~~R~~T~~L~~L~~S~~L~~V~~L~~A~~L~~L~~F~~P~~ | -7 |
| AGCATGGCGAGCATGGCAATGCACGTGGCCCAGCCTGCTGTGGTACTGGCCAGCAGCCGA | +42 |
| S~~M~~A~~S~~M~~A~~M~~H~~V~~A~~Q~~P~~A~~V~~V~~L~~A~~S~~S~~R~~ | +14 |
| +1 | |
| GGCATCGCCAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAAGCCACTGAGGTCCGGGTG | +102 |
| G~~I~~A~~S~~F~~V~~C~~E~~Y~~A~~S~~P~~G~~K~~A~~T~~E~~V~~R~~V~~ | +34 |
| ACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATG | +162 |
| T~~V~~L~~R~~Q~~A~~D~~S~~Q~~V~~T~~E~~V~~C~~A~~A~~T~~Y~~M~~M~~ | +54 |
| GGGAATGAGTTGACCTTCCTAGATGATTCCATCTGCACGGGCACCTCCAGTGGAATCAA | +222 |
| G~~N~~E~~L~~T~~F~~L~~D~~D~~S~~I~~C~~T~~G~~T~~S~~S~~G~~N~~Q~~ | +74 |
| GTGAACCTCACTATCCAAGGACTGAGGGCCATGGACACGGGACTCTACATCTGCAAGGTG | +282 |
| V~~N~~L~~T~~I~~Q~~G~~L~~R~~A~~M~~D~~T~~G~~L~~Y~~I~~C~~K~~V~~ | +94 |
| GAGCTCATGTACCCACCGCCATACTACCTGGGCATAGGCAACGGAACCCAGATTTATGTA | +342 |
| E~~L~~M~~Y~~P~~P~~P~~Y~~Y~~L~~G~~I~~G~~N~~G~~T~~Q~~I~~Y~~V~~ | +114 |
| ATTGATCCAGAACCGTGCCCGAGATTCTGATCAGGAGCCCAAATCTTCTGACAAAACTCAC | +402 |
| I~~D~~P~~E~~P~~C~~P~~D~~S~~D~~Q~~E~~P~~K~~S~~S~~D~~K~~T~~H~~ | +134 |
| ACATCCCCACCGTCCCCAGCACCTGAACTCCTGGGTGGATCGTCAGTCTTCTCTTCCCC | +462 |
| T~~S~~P~~P~~S~~P~~A~~P~~E~~L~~L~~G~~G~~S~~S~~V~~F~~L~~F~~P~~ | +154 |
| CCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTG | +522 |
| P~~K~~P~~K~~D~~T~~L~~M~~I~~S~~R~~T~~P~~E~~V~~T~~C~~V~~V~~V~~ | +174 |
| GACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGAGGTG | +582 |
| D~~V~~S~~H~~E~~D~~P~~E~~V~~K~~F~~N~~W~~Y~~V~~D~~G~~V~~E~~V~~ | +194 |
| CATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGGGTGGTCAGC | +642 |
| H~~N~~A~~K~~T~~K~~P~~R~~E~~E~~Q~~Y~~N~~S~~T~~Y~~R~~V~~V~~S~~ | +214 |
| GTCCTCACCGTCCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCC | +702 |
| V~~L~~T~~V~~L~~H~~Q~~D~~W~~L~~N~~G~~K~~E~~Y~~K~~C~~K~~V~~S~~ | +234 |
| AACAAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAGCCCCGA | +762 |
| N~~K~~A~~L~~P~~A~~P~~I~~E~~K~~T~~I~~S~~K~~A~~K~~G~~Q~~P~~R~~ | +254 |
| GAACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCTGACCAAGAACCAGGTCAGC | +822 |
| E~~P~~Q~~V~~Y~~T~~L~~P~~P~~S~~R~~D~~E~~L~~T~~K~~N~~Q~~V~~S~~ | +274 |
| CTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAAT | +882 |
| L~~T~~C~~L~~V~~K~~G~~F~~Y~~P~~S~~D~~I~~A~~V~~E~~W~~E~~S~~N~~ | +294 |
| GGGCAGCCGGAGAACAACCTACAAGACCACGCTCCCGTGCTGGACTCCGACGGCTCCTTC | +942 |
| G~~Q~~P~~E~~N~~N~~Y~~K~~T~~T~~P~~P~~V~~L~~D~~S~~D~~G~~S~~F~~ | +314 |
| TTCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGGAACGTCTTCTCA | +1002 |
| F~~L~~Y~~S~~K~~L~~T~~V~~D~~K~~S~~R~~W~~Q~~Q~~G~~N~~V~~F~~S~~ | +334 |
| TGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCT | +1062 |
| C~~S~~V~~M~~H~~E~~A~~L~~H~~N~~H~~Y~~T~~Q~~K~~S~~L~~S~~L~~S~~ | +354 |
| CCGGGTAAATGA | |
| P~~G~~K~~* | |

FIGURE 22

| | |
|---|-------|
| ATGGGTGTACTGCTCACACAGAGGACGCTGCTCAGTCTGGTCCTTGCACTCCTGTTTCCA | -19 |
| M~G~V~L~L~T~Q~R~T~L~L~S~L~V~L~A~L~L~F~P~ | -7 |
| AGCATGGCGAGCATGGCAATGCACGTGGCCAGCCTGCTGTGGTACTGGCCAGCAGCCGA | +42 |
| S~M~A~S~M~A~M~H~V~A~Q~P~A~V~V~L~A~S~S~R~ | +14 |
| +1 | |
| GGCATCGCTAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAAGCCACTGAGGTCCGGGTG | +102 |
| G~I~A~S~F~V~C~E~Y~A~S~P~G~K~A~T~E~V~R~V~ | +34 |
| ACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATG | +162 |
| T~V~L~R~Q~A~D~S~Q~V~T~E~V~C~A~A~T~Y~M~M~ | +54 |
| GGGAATGAGTTGACCTTCCTAGATGATTCCATCTGCACGGGCACCTCCAGTGGAAATCAA | +222 |
| G~N~E~L~T~F~L~D~D~S~I~C~T~G~T~S~S~G~N~Q~ | +74 |
| GTGAACCTCACTATCCAAGGACTGAGGGCCATGGACACGGGACTCTACATCTGCAAGGTG | +282 |
| V~N~L~T~I~Q~G~L~R~A~M~D~T~G~L~Y~I~C~K~V~ | +94 |
| GAGCTCATGTACCCACCGCCATACTACGAGGGCATAGGCAACGGAACCCAGATTTATGTA | +342 |
| E~L~M~Y~P~P~P~Y~Y~E~G~I~G~N~G~T~Q~I~Y~V~ | +114 |
| ATTGATCCAGAACCGTGCCAGATTCTGATCAGGAGCCCAAATCTTCTGACAAAACCTCAC | +402 |
| I~D~P~E~P~C~P~D~S~D~Q~E~P~K~S~S~D~K~T~H~ | +134 |
| ACATCCCCACCGTCCCCAGCACCTGAACTCCTGGGGGGATCGTCAGTCTTCTCTTCCCC | +462 |
| T~S~P~P~S~P~A~P~E~L~L~G~G~S~S~V~F~L~F~P~ | +154 |
| CCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTG | +522 |
| P~K~P~K~D~T~L~M~I~S~R~T~P~E~V~T~C~V~V~V~ | +174 |
| GACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGAGGTG | +582 |
| D~V~S~H~E~D~P~E~V~K~F~N~W~Y~V~D~G~V~E~V~ | +194 |
| CATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGC | +642 |
| H~N~A~K~T~K~P~R~E~E~Q~Y~N~S~T~Y~R~V~V~S~ | +214 |
| GTCCTCACCGTCTTGACACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCC | +702 |
| V~L~T~V~L~H~Q~D~W~L~N~G~K~E~Y~K~C~K~V~S~ | +234 |
| AACAAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAGCCCCGA | +762 |
| N~K~A~L~P~A~P~I~E~K~T~I~S~K~A~K~G~Q~P~R~ | +254 |
| GAACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCTGACCAAGAACCAGGTCAGC | +822 |
| E~P~Q~V~Y~T~L~P~P~S~R~D~E~L~T~K~N~Q~V~S~ | +274 |
| CTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAAT | +882 |
| L~T~C~L~V~K~G~F~Y~P~S~D~I~A~V~E~W~E~S~N~ | +294 |
| GGGCAGCCGGAGAACAACCTACAAGACCACGCTCCCGTGCTGGACTCCGACGGCTCCTTC | +942 |
| G~Q~P~E~N~N~Y~K~T~T~P~P~V~L~D~S~D~G~S~F~ | +314 |
| TTCTCTACAGCAAGCTCACCGTGACAAAGAGCAGGTGGCAGCAGGGGAACGTCTTCTCA | +1002 |
| F~L~Y~S~K~L~T~V~D~K~S~R~W~Q~Q~G~N~V~F~S~ | +334 |
| TGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCT | +1062 |
| C~S~V~M~H~E~A~L~H~N~H~Y~T~Q~K~S~L~S~L~S~ | +354 |
| CCGGGTAAATGA | |
| P~G~K~* | |

FIGURE 23

| | |
|--|-------|
| ATGGGTGTACTGCTCACACAGAGGACGCTGCTCAGTCTGGTCCTTGCACTCCTGTTTCCA | -19 |
| M~~G~~V~~L~~L~~T~~Q~~R~~T~~L~~L~~S~~L~~V~~L~~A~~L~~L~~F~~P~~ | -7 |
| AGCATGGCGAGCATGGCAATGCACGTGGCCCAGCCTGCTGTGGTACTGGCCAGCAGCCGA | +42 |
| S~~M~~A~~S~~M~~A~~M~~H~~V~~A~~Q~~P~~A~~V~~V~~L~~A~~S~~S~~R~~ | +14 |
| +1 | |
| GGCATCGCTAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAATATACTGAGGTCCGGGTG | +102 |
| G~~I~~A~~S~~F~~V~~C~~E~~Y~~A~~S~~P~~G~~K~~Y~~T~~E~~V~~R~~V~~ | +34 |
| ACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATG | +162 |
| T~~V~~L~~R~~Q~~A~~D~~S~~Q~~V~~T~~E~~V~~C~~A~~A~~T~~Y~~M~~M~~ | +54 |
| GGGAATGAGTTGACCTTCCTAGATGATTCCATCTGCACGGGCACCTCCAGTGGAATCAA | +222 |
| G~~N~~E~~L~~T~~F~~L~~D~~D~~S~~I~~C~~T~~G~~T~~S~~S~~G~~N~~Q~~ | +74 |
| GTGAACCTCACTATCCAAGGACTGAGGGCCATGGACACGGGACTCTACATCTGCAAGGTG | +282 |
| V~~N~~L~~T~~I~~Q~~G~~L~~R~~A~~M~~D~~T~~G~~L~~Y~~I~~C~~K~~V~~ | +94 |
| GAGCTCATGTACCCACCGCCATACTACGAGGGCATAGGCAACGGAACCCAGATTTATGTA | +342 |
| E~~L~~M~~Y~~P~~P~~P~~Y~~Y~~E~~G~~I~~G~~N~~G~~T~~Q~~I~~Y~~V~~ | +114 |
| ATTGATCCAGAACCGTGCCAGATTCTGATCAGGAGCCCCAAATCTTCTGACAAAACCTCAC | +402 |
| I~~D~~P~~E~~P~~C~~P~~D~~S~~D~~Q~~E~~P~~K~~S~~S~~D~~K~~T~~H~~ | +134 |
| ACATCCCCACCGTCCCCAGCACCTGAACTCCTGGGGGGATCGTCAGTCTTCCTCTTCCCC | +462 |
| T~~S~~P~~P~~S~~P~~A~~P~~E~~L~~L~~G~~G~~S~~S~~V~~F~~L~~F~~P~~ | +154 |
| CCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTG | +522 |
| P~~K~~P~~K~~D~~T~~L~~M~~I~~S~~R~~T~~P~~E~~V~~T~~C~~V~~V~~V~~ | +174 |
| GACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTG | +582 |
| D~~V~~S~~H~~E~~D~~P~~E~~V~~K~~F~~N~~W~~Y~~V~~D~~G~~V~~E~~V~~ | +194 |
| CATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGC | +642 |
| H~~N~~A~~K~~T~~K~~P~~R~~E~~E~~Q~~Y~~N~~S~~T~~Y~~R~~V~~V~~S~~ | +214 |
| GTCCTCACCGTCTGCAACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCC | +702 |
| V~~L~~T~~V~~L~~H~~Q~~D~~W~~L~~N~~G~~K~~E~~Y~~K~~C~~K~~V~~S~~ | +234 |
| AACAAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAGCCCCGA | +762 |
| N~~K~~A~~L~~P~~A~~P~~I~~E~~K~~T~~I~~S~~K~~A~~K~~G~~Q~~P~~R~~ | +254 |
| GAACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCTGACCAAGAACCAGGTGAGC | +822 |
| E~~P~~Q~~V~~Y~~T~~L~~P~~P~~S~~R~~D~~E~~L~~T~~K~~N~~Q~~V~~S~~ | +274 |
| CTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAAT | +882 |
| L~~T~~C~~L~~V~~K~~G~~F~~Y~~P~~S~~D~~I~~A~~V~~E~~W~~E~~S~~N~~ | +294 |
| GGGCAGCCGGAGAACAACACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTC | +942 |
| G~~Q~~P~~E~~N~~N~~Y~~K~~T~~T~~P~~P~~V~~L~~D~~S~~D~~G~~S~~F~~ | +314 |
| TTCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGGAACGTCTTCTCA | +1002 |
| F~~L~~Y~~S~~K~~L~~T~~V~~D~~K~~S~~R~~W~~Q~~Q~~G~~N~~V~~F~~S~~ | +334 |
| TGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCT | +1062 |
| C~~S~~V~~M~~H~~E~~A~~L~~H~~N~~H~~Y~~T~~Q~~K~~S~~L~~S~~L~~S~~ | +354 |
| CCGGGTAAATGA | |
| P~~G~~K~~* | |

FIGURE 24

| | |
|--|-------|
| ATGGGTGTACTGCTCACACAGAGGACGCTGCTCAGTCTGGTCCTTGCACTCCTGTTTCCA | -19 |
| M~G~V~L~L~T~Q~R~T~L~L~S~L~V~L~A~L~L~F~P~ | -7 |
| AGCATGGCGAGCATGGCAATGCACGTGGCCCAGCCTGCTGTGGTACTGGCCAGCAGCCGA | +42 |
| S~M~A~S~M~A~M~H~V~A~Q~P~A~V~V~L~A~S~S~R~ | +14 |
| +1 | |
| GGCATCGCTAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAATTGACTGAGGTCCGGGTG | +102 |
| G~I~A~S~F~V~C~E~Y~A~S~P~G~K~L~T~E~V~R~V~ | +34 |
| ACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATG | +162 |
| T~V~L~R~Q~A~D~S~Q~V~T~E~V~C~A~A~T~Y~M~M~ | +54 |
| GGGAATGAGTTGACCTTCCTAGATGATTCCATCTGCACGGGCACCTCCAGTGGAATCAA | +222 |
| G~N~E~L~T~F~L~D~D~S~I~C~T~G~T~S~S~G~N~Q~ | +74 |
| GTGAACCTCACTATCCAAGGACTGAGGGCCATGGACACGGGACTCTACATCTGCAAGGTG | +282 |
| V~N~L~T~I~Q~G~L~R~A~M~D~T~G~L~Y~I~C~K~V~ | +94 |
| GAGCTCATGTACCCACCGCCATACTACGAGGGCATAGGCAACGGAACCCAGATTTATGTA | +342 |
| E~L~M~Y~P~P~P~Y~Y~E~G~I~G~N~G~T~Q~I~Y~V~ | +114 |
| ATTGATCCAGAACCGTGCCAGATTCTGATCAGGAGCCCCAAATCTTCTGACAAAACCTCAC | +402 |
| I~D~P~E~P~C~P~D~S~D~Q~E~P~K~S~S~D~K~T~H~ | +134 |
| ACATCCCCACCGTCCCCAGCACCTGAACTCCTGGGGGGATCGTCAGTCTTCCTCTTCCCC | +462 |
| T~S~P~P~S~P~A~P~E~L~L~G~G~S~S~V~F~L~F~P~ | +154 |
| CCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTG | +522 |
| P~K~P~K~D~T~L~M~I~S~R~T~P~E~V~T~C~V~V~V~ | +174 |
| GACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGAGGTG | +582 |
| D~V~S~H~E~D~P~E~V~K~F~N~W~Y~V~D~G~V~E~V~ | +194 |
| CATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGC | +642 |
| H~N~A~K~T~K~P~R~E~E~Q~Y~N~S~T~Y~R~V~V~S~ | +214 |
| GTCCTCACCGTCTCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCC | +702 |
| V~L~T~V~L~H~Q~D~W~L~N~G~K~E~Y~K~C~K~V~S~ | +234 |
| AACAAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAGCCAAAGGGCAGCCCCGA | +762 |
| N~K~A~L~P~A~P~I~E~K~T~I~S~K~A~K~G~Q~P~R~ | +254 |
| GAACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCTGACCAAGAACCAGGTGAGC | +822 |
| E~P~Q~V~Y~T~L~P~P~S~R~D~E~L~T~K~N~Q~V~S~ | +274 |
| CTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAAT | +882 |
| L~T~C~L~V~K~G~F~Y~P~S~D~I~A~V~E~W~E~S~N~ | +294 |
| GGGCAGCCGGAGAACAACACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTC | +942 |
| G~Q~P~E~N~N~Y~K~T~T~P~P~V~L~D~S~D~G~S~F~ | +314 |
| TTCCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGGAACGTCTTCTCA | +1002 |
| F~L~Y~S~K~L~T~V~D~K~S~R~W~Q~Q~G~N~V~F~S~ | +334 |
| TGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCT | +1062 |
| C~S~V~M~H~E~A~L~H~N~H~Y~T~Q~K~S~L~S~L~S~ | +354 |
| CCGGGTAAATGA | |
| P~G~K~* | |

FIGURE 25

| | |
|---|-------|
| ATGGGTGTACTGCTCACACAGAGGACGCTGCTCAGTCTGGTCCTTGCACTCCTGTTTCCA | -19 |
| M~~G~~V~~L~~L~~T~~Q~~R~~T~~L~~L~~S~~L~~V~~L~~A~~L~~L~~F~~P~~ | -7 |
| AGCATGGCGAGCATGGCAATGCACGTGGCCCAGCCTGCTGTGGTACTGGCCAGCAGCCGA | +42 |
| S~~M~~A~~S~~M~~A~~M~~H~~V~~A~~Q~~P~~A~~V~~V~~L~~A~~S~~S~~R~~ | +14 |
| +1 | |
| GGCATCGCTAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAACTACTGAGGTCCGGGTG | +102 |
| G~~I~~A~~S~~F~~V~~C~~E~~Y~~A~~S~~P~~G~~K~~T~~T~~E~~V~~R~~V~~ | +34 |
| ACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATG | +162 |
| T~~V~~L~~R~~Q~~A~~D~~S~~Q~~V~~T~~E~~V~~C~~A~~A~~T~~Y~~M~~M~~ | +54 |
| GGGAATGAGTTGACCTTCCTAGATGATTCCATCTGCACGGGCACCTCCAGTGGAATCAA | +222 |
| G~~N~~E~~L~~T~~F~~L~~D~~D~~S~~I~~C~~T~~G~~T~~S~~S~~G~~N~~Q~~ | +74 |
| GTGAACCTCACTATCCAAGGACTGAGGGCCATGGACACGGGACTCTACATCTGCAAGGTG | +282 |
| V~~N~~L~~T~~I~~Q~~G~~L~~R~~A~~M~~D~~T~~G~~L~~Y~~I~~C~~K~~V~~ | +94 |
| GAGCTCATGTACCCACCGCCATACTACGAGGGCATAGGCAACGGAACCCAGATTTATGTA | +342 |
| E~~L~~M~~Y~~P~~P~~P~~Y~~Y~~E~~G~~I~~G~~N~~G~~T~~Q~~I~~Y~~V~~ | +114 |
| ATTGATCCAGAACCGTGCCAGATTCTGATCAGGAGCCCCAAATCTTCTGACAAAACCTCAC | +402 |
| I~~D~~P~~E~~P~~C~~P~~D~~S~~D~~Q~~E~~P~~K~~S~~S~~D~~K~~T~~H~~ | +134 |
| ACATCCCCACCGTCCCCAGCACCTGAACTCCTGGGGGGATCGTCAGTCTTCCTCTTCCCC | +462 |
| T~~S~~P~~P~~S~~P~~A~~P~~E~~L~~L~~G~~G~~S~~S~~V~~F~~L~~F~~P~~ | +154 |
| CCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTCACATGCGTGGTGGTG | +522 |
| P~~K~~P~~K~~D~~T~~L~~M~~I~~S~~R~~T~~P~~E~~V~~T~~C~~V~~V~~V~~ | +174 |
| GACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGGAGGTG | +582 |
| D~~V~~S~~H~~E~~D~~P~~E~~V~~K~~F~~N~~W~~Y~~V~~D~~G~~V~~E~~V~~ | +194 |
| CATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGC | +642 |
| H~~N~~A~~K~~T~~K~~P~~R~~E~~E~~Q~~Y~~N~~S~~T~~Y~~R~~V~~V~~S~~ | +214 |
| GTCCTCACCGTCTCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCC | +702 |
| V~~L~~T~~V~~L~~H~~Q~~D~~W~~L~~N~~G~~K~~E~~Y~~K~~C~~K~~V~~S~~ | +234 |
| AACAAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAGCCCCGA | +762 |
| N~~K~~A~~L~~P~~A~~P~~I~~E~~K~~T~~I~~S~~K~~A~~K~~G~~Q~~P~~R~~ | +254 |
| GAACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCTGACCAAGAACCAGGTGAGC | +822 |
| E~~P~~Q~~V~~Y~~T~~L~~P~~P~~S~~R~~D~~E~~L~~T~~K~~N~~Q~~V~~S~~ | +274 |
| CTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAAT | +882 |
| L~~T~~C~~L~~V~~K~~G~~F~~Y~~P~~S~~D~~I~~A~~V~~E~~W~~E~~S~~N~~ | +294 |
| GGGCAGCCGGAGAACAATAACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTC | +942 |
| G~~Q~~P~~E~~N~~N~~Y~~K~~T~~T~~P~~P~~V~~L~~D~~S~~D~~G~~S~~F~~ | +314 |
| TTCCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGCAGGGGAACGTCTTCTCA | +1002 |
| F~~L~~Y~~S~~K~~L~~T~~V~~D~~K~~S~~R~~W~~Q~~Q~~G~~N~~V~~F~~S~~ | +334 |
| TGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCT | +1062 |
| C~~S~~V~~M~~H~~E~~A~~L~~H~~N~~H~~Y~~T~~Q~~K~~S~~L~~S~~L~~S~~ | +354 |
| CCGGGTAAATGA | |
| P~~G~~K~~* | |

FIGURE 26

| | |
|--|-------|
| ATGGGTGTACTGCTCACACAGAGGACGCTGCTCAGTCTGGTCCTTGCACTCCTGTTTCCA | -19 |
| M~G~V~L~L~T~Q~R~T~L~L~S~L~V~L~A~L~L~F~P~ | -7 |
| AGCATGGCGAGCATGGCAATGCACGTGGCCCAGCCTGCTGTGGTACTGGCCAGCAGCCGA | +42 |
| S~M~A~S~M~A~M~H~V~A~Q~P~A~V~V~L~A~S~S~R~ | +14 |
| +1 | |
| GGCATCGCTAGCTTTGTGTGTGAGTATGCATCTCCAGGCAAATGGACTGAGGTCCGGGTG | +102 |
| G~I~A~S~F~V~C~E~Y~A~S~P~G~K~W~T~E~V~R~V~ | +34 |
| ACAGTGCTTCGGCAGGCTGACAGCCAGGTGACTGAAGTCTGTGCGGCAACCTACATGATG | +162 |
| T~V~L~R~Q~A~D~S~Q~V~T~E~V~C~A~A~T~Y~M~M~ | +54 |
| GGGAATGAGTTGACCTTCCTAGATGATTCCATCTGCACGGGCACCTCCAGTGGAATCAA | +222 |
| G~N~E~L~T~F~L~D~D~S~I~C~T~G~T~S~S~G~N~Q~ | +74 |
| GTGAACCTCACTATCCAAGGACTGAGGGCCATGGACACGGGACTCTACATCTGCAAGGTG | +282 |
| V~N~L~T~I~Q~G~L~R~A~M~D~T~G~L~Y~I~C~K~V~ | +94 |
| GAGCTCATGTACCCACCGCCATACTACGAGGGCATAGGCAACGGAACCCAGATTTATGTA | +342 |
| E~L~M~Y~P~P~P~Y~Y~E~G~I~G~N~G~T~Q~I~Y~V~ | +114 |
| ATTGATCCAGAACCGTGCCAGATTCTGATCAGGAGCCCAAATCTTCTGACAAAACCTCAC | +402 |
| I~D~P~E~P~C~P~D~S~D~Q~E~P~K~S~S~D~K~T~H~ | +134 |
| ACATCCCCACCGTCCCCAGCACCTGAACTCCTGGGGGGATCGTCAGTCTTCCTCTTCCCC | +462 |
| T~S~P~P~S~P~A~P~E~L~L~G~G~S~S~V~F~L~F~P~ | +154 |
| CCAAAACCCAAGGACACCCTCATGATCTCCCGGACCCCTGAGGTACATGCGTGGTGGTG | +522 |
| P~K~P~K~D~T~L~M~I~S~R~T~P~E~V~T~C~V~V~V~ | +174 |
| GACGTGAGCCACGAAGACCCTGAGGTCAAGTTCAACTGGTACGTGGACGGCGTGAGGTG | +582 |
| D~V~S~H~E~D~P~E~V~K~F~N~W~Y~V~D~G~V~E~V~ | +194 |
| CATAATGCCAAGACAAAGCCGCGGGAGGAGCAGTACAACAGCACGTACCGTGTGGTCAGC | +642 |
| H~N~A~K~T~K~P~R~E~E~Q~Y~N~S~T~Y~R~V~V~S~ | +214 |
| GTCCTCACCGTCTCTGCACCAGGACTGGCTGAATGGCAAGGAGTACAAGTGCAAGGTCTCC | +702 |
| V~L~T~V~L~H~Q~D~W~L~N~G~K~E~Y~K~C~K~V~S~ | +234 |
| AACAAAGCCCTCCCAGCCCCCATCGAGAAAACCATCTCCAAAGCCAAAGGGCAGCCCCGA | +762 |
| N~K~A~L~P~A~P~I~E~K~T~I~S~K~A~K~G~Q~P~R~ | +254 |
| GAACCACAGGTGTACACCCTGCCCCCATCCCGGGATGAGCTGACCAAGAACCAGGTACAGC | +822 |
| E~P~Q~V~Y~T~L~P~P~S~R~D~E~L~T~K~N~Q~V~S~ | +274 |
| CTGACCTGCCTGGTCAAAGGCTTCTATCCCAGCGACATCGCCGTGGAGTGGGAGAGCAAT | +882 |
| L~T~C~L~V~K~G~F~Y~P~S~D~I~A~V~E~W~E~S~N~ | +294 |
| GGGCAGCCGGAGAACAACACTACAAGACCACGCCTCCCGTGCTGGACTCCGACGGCTCCTTC | +942 |
| G~Q~P~E~N~N~Y~K~T~T~P~P~V~L~D~S~D~G~S~F~ | +314 |
| TTCCTCTACAGCAAGCTCACCGTGGACAAGAGCAGGTGGCAGAGGGGAACGTCTTCTCA | +1002 |
| F~L~Y~S~K~L~T~V~D~K~S~R~W~Q~Q~G~N~V~F~S~ | +334 |
| TGCTCCGTGATGCATGAGGCTCTGCACAACCACTACACGCAGAAGAGCCTCTCCCTGTCT | +1062 |
| C~S~V~M~H~E~A~L~H~N~H~Y~T~Q~K~S~L~S~L~S~ | +354 |
| CCGGGTAAATGA | |
| P~G~K~* | |

FIGURE 27

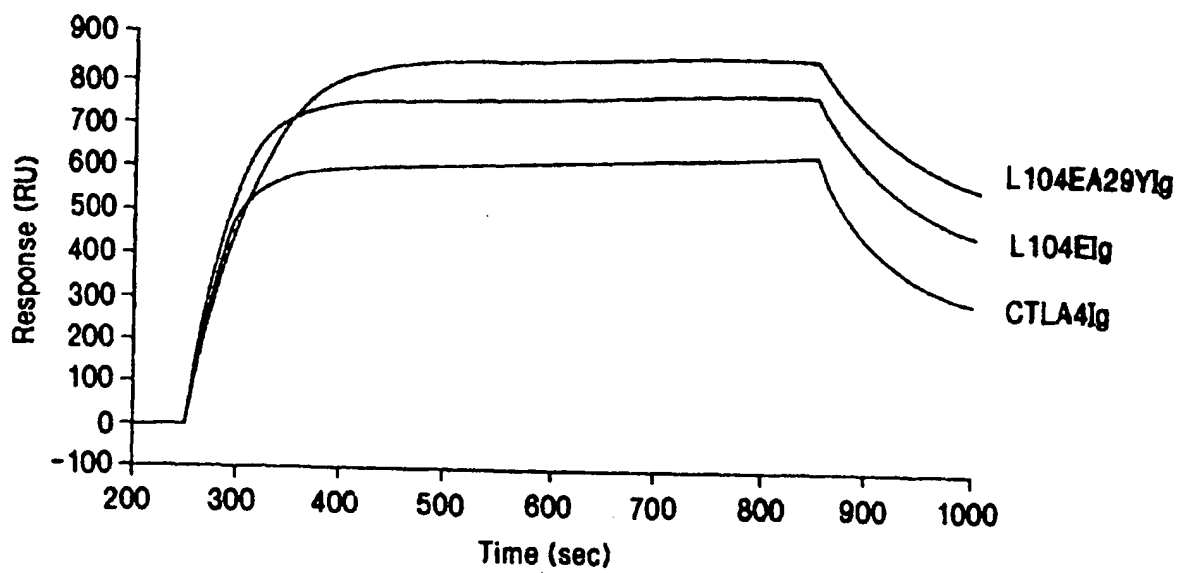


FIG 28

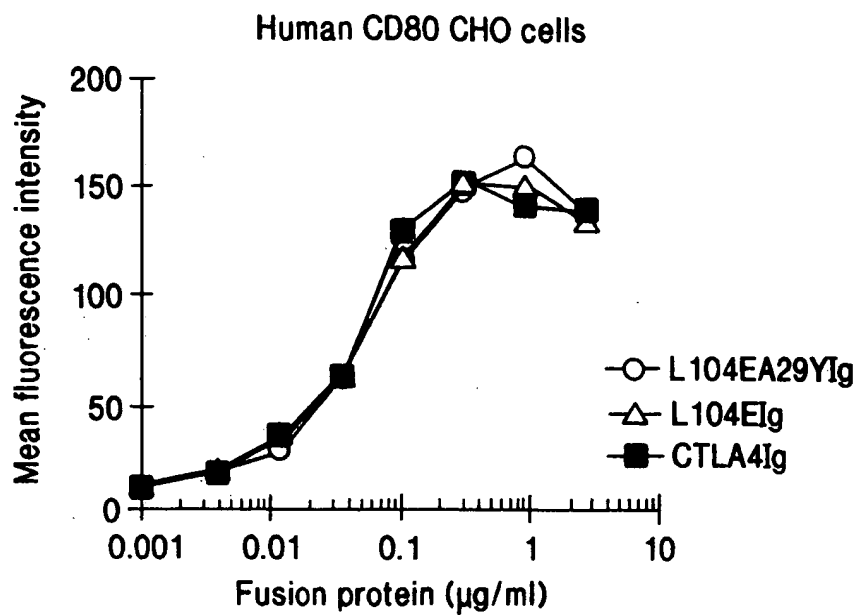


FIG 29A

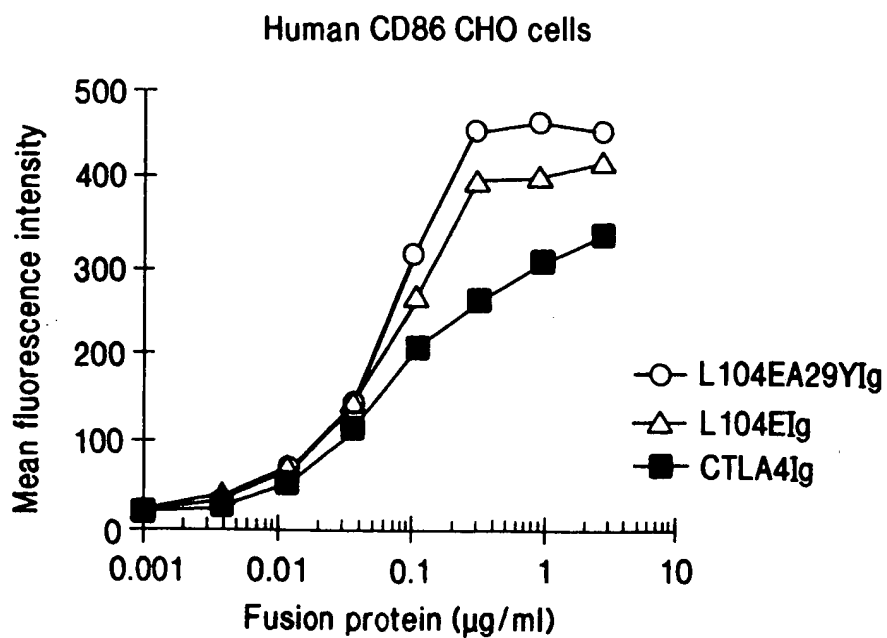


FIG 29B

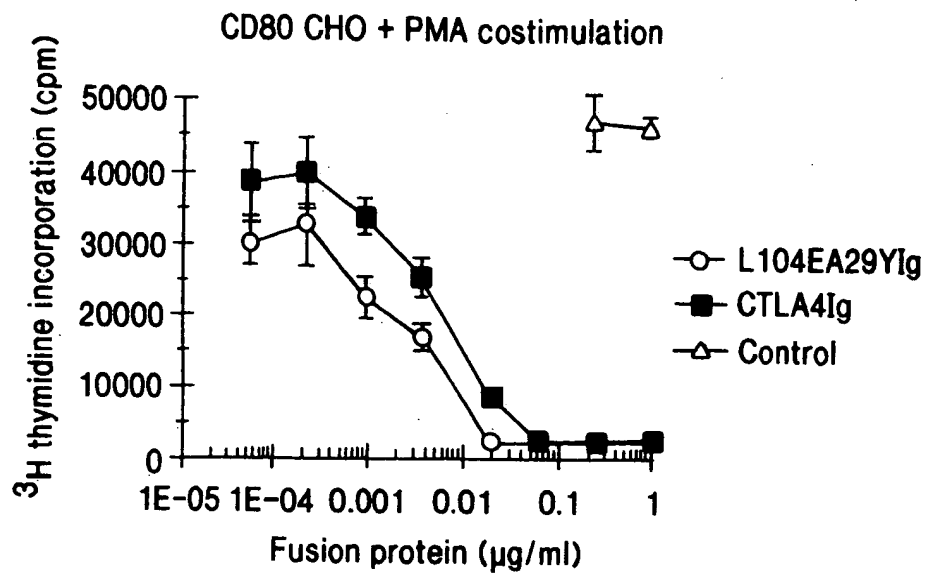


FIG 30A

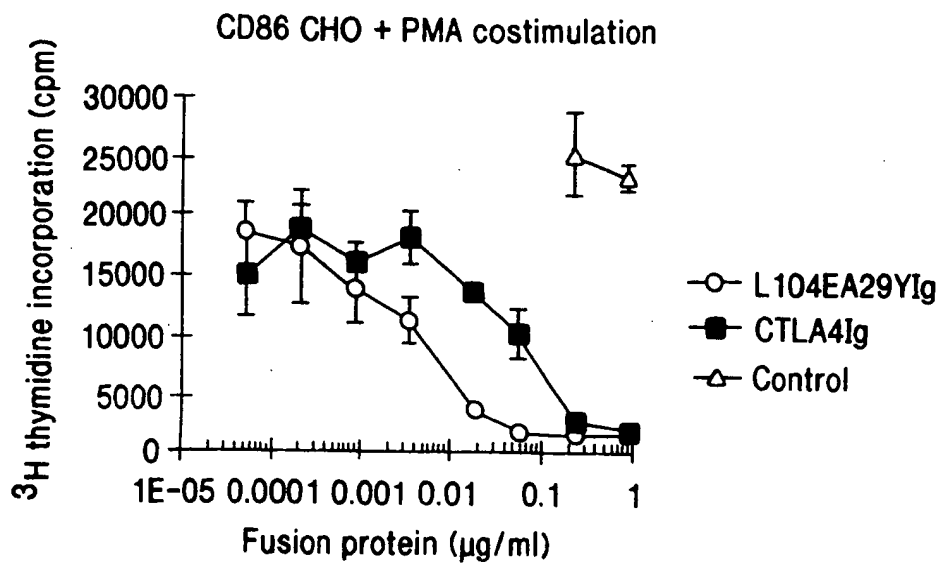


FIG 30B

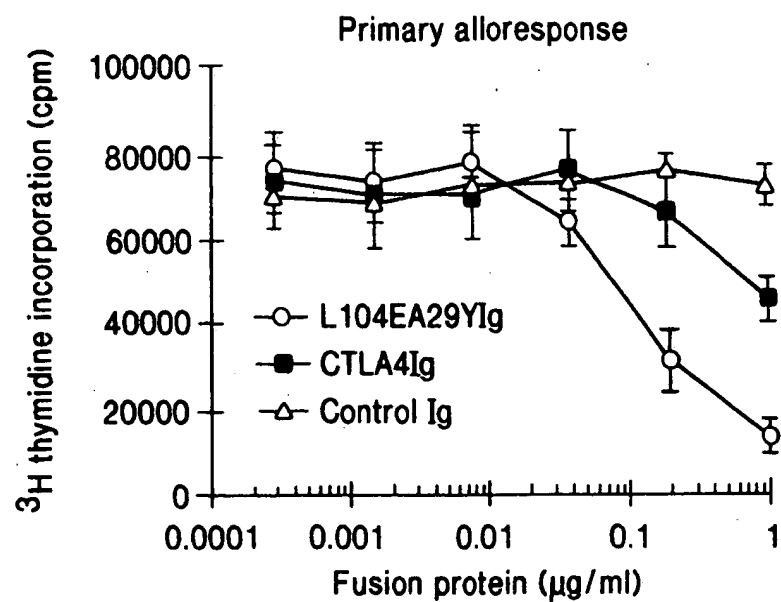


FIG 31A

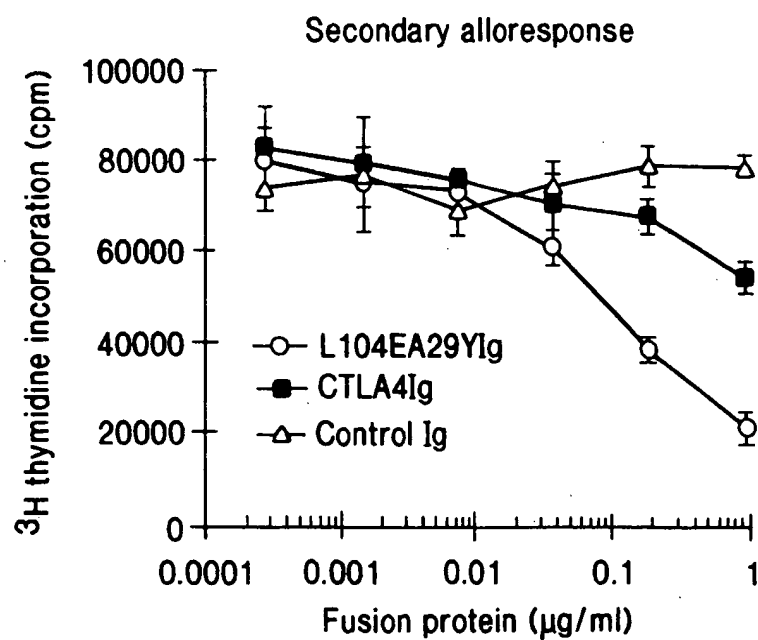


FIG 31B

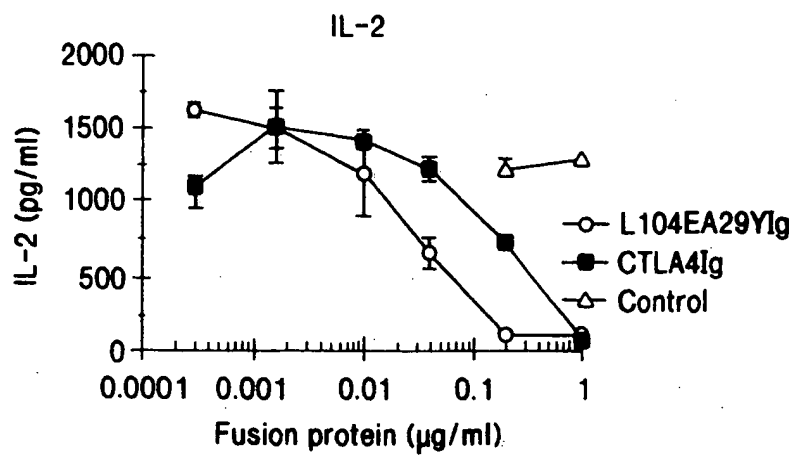


FIG 32A

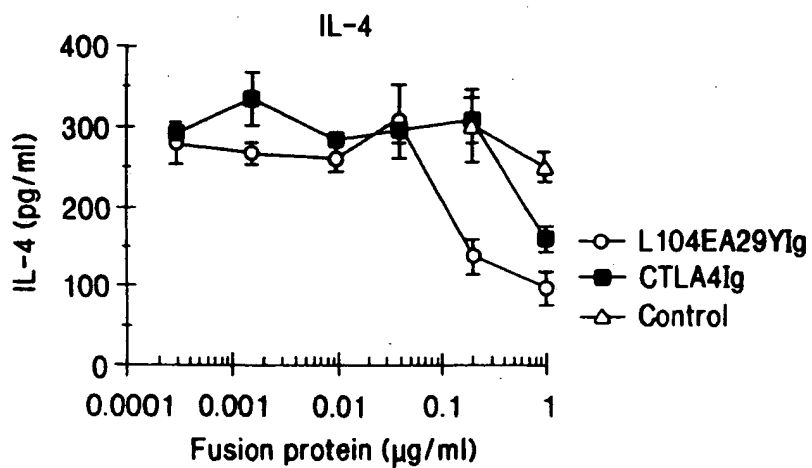


FIG 32B

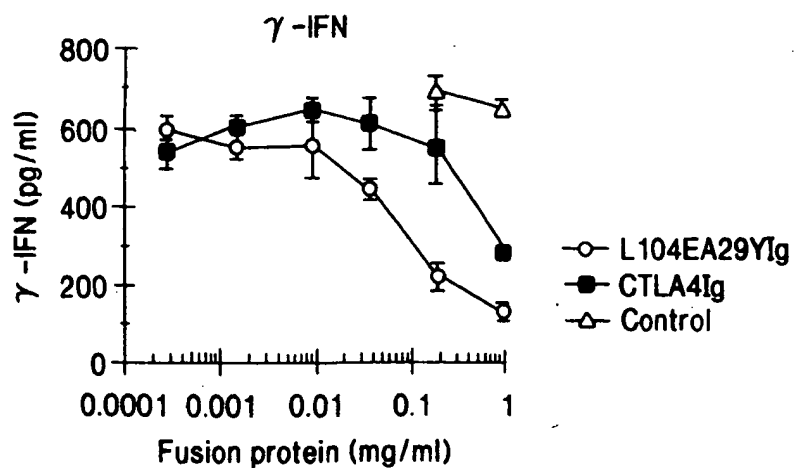


FIG 32C

Inhibition of PHA-induced monkey T cell proliferation

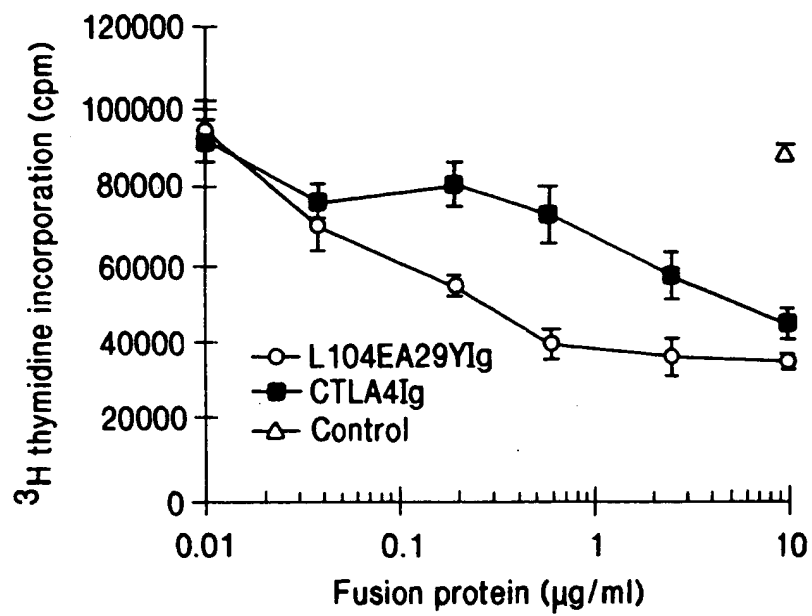


FIG 33

FIG. 34A

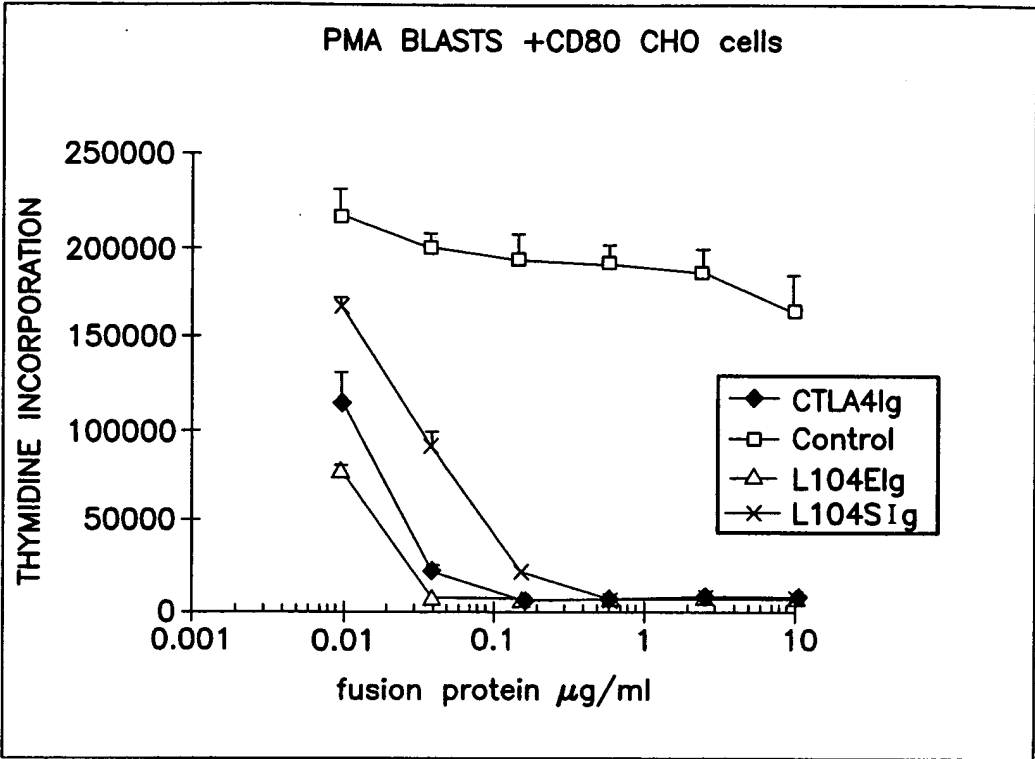


FIG. 34B

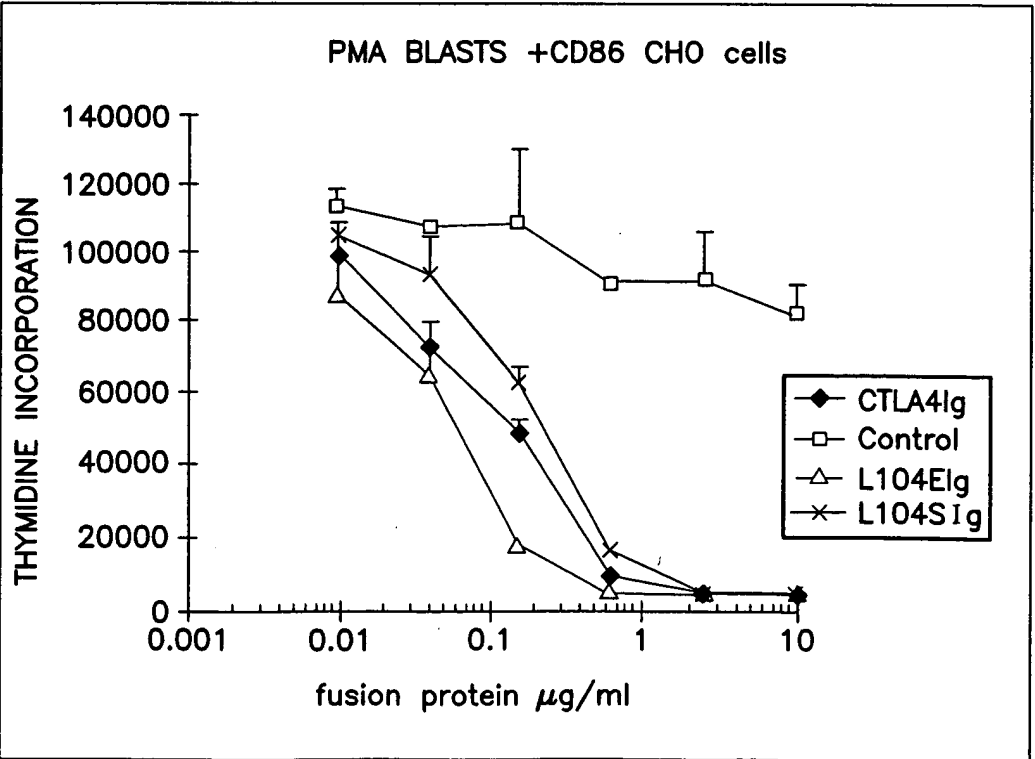


FIG. 35A

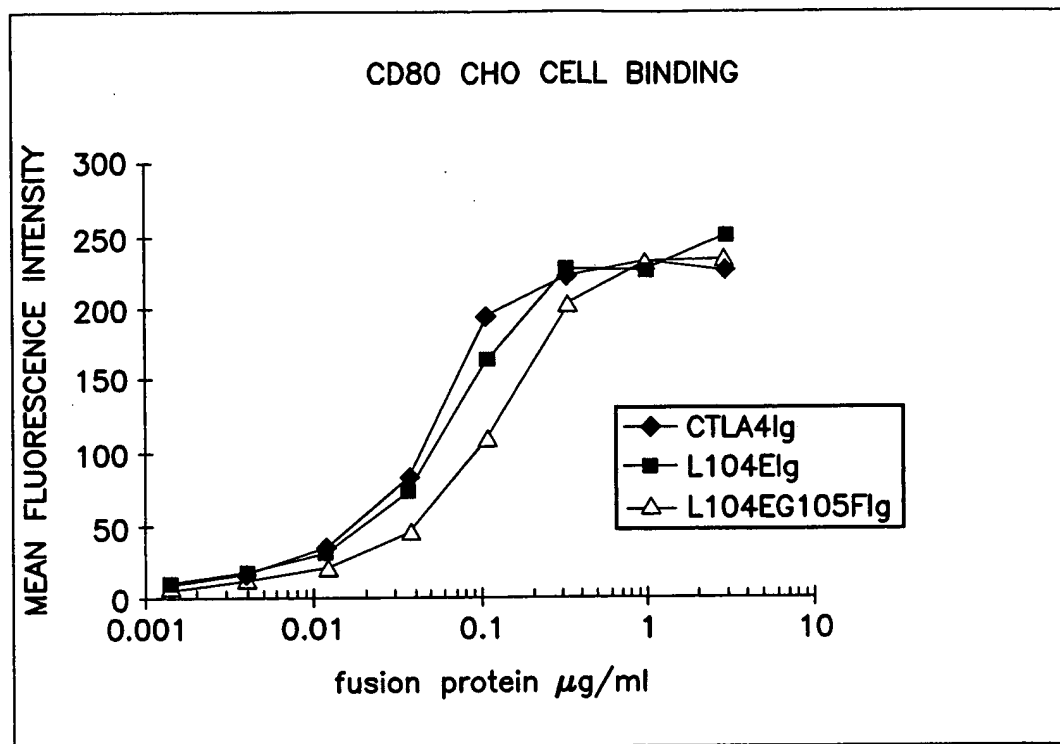


FIG. 35B

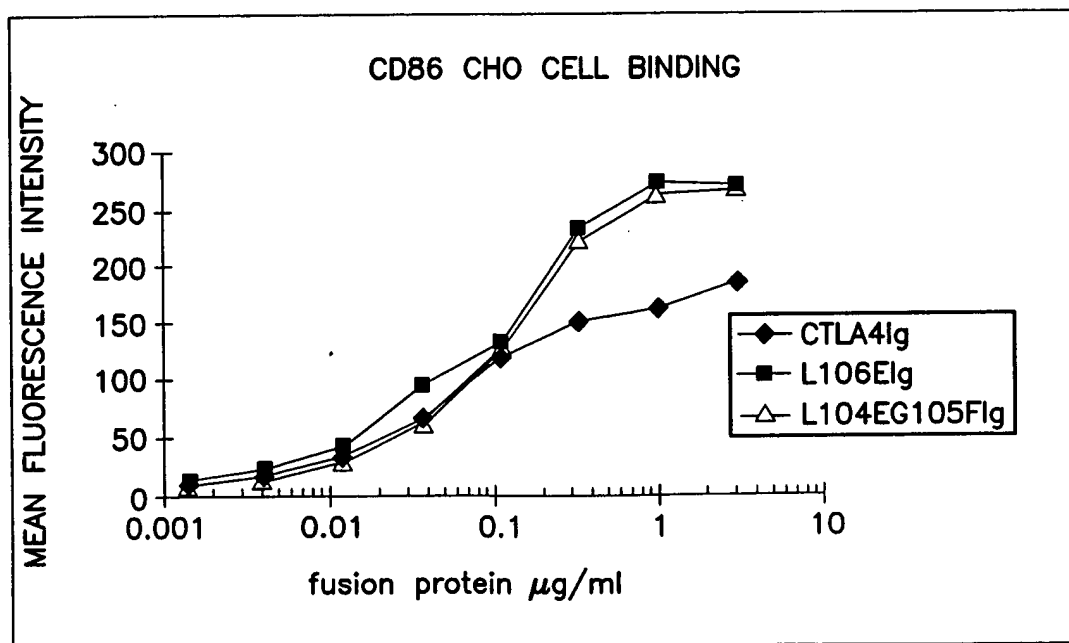


FIG. 36

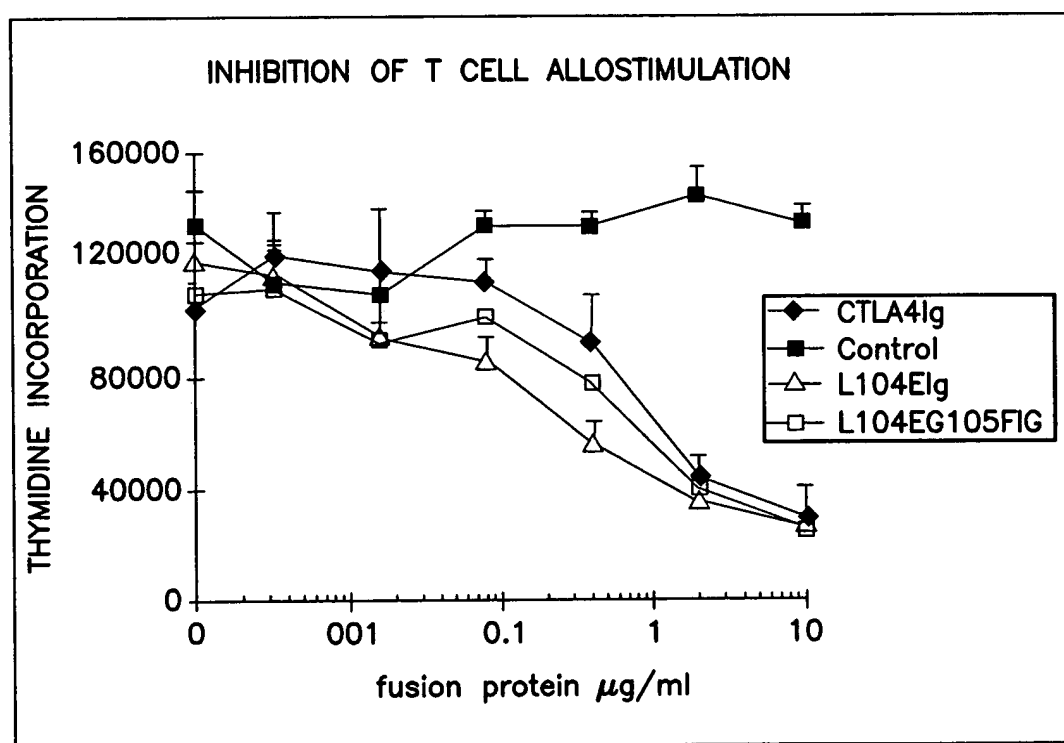


FIG. 37A

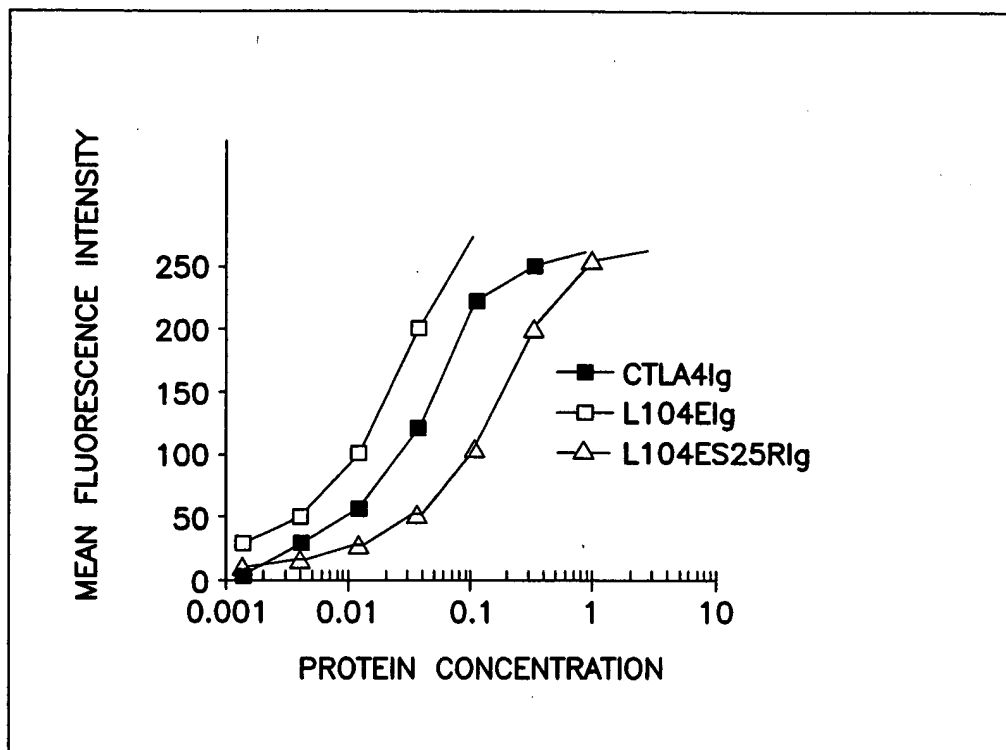
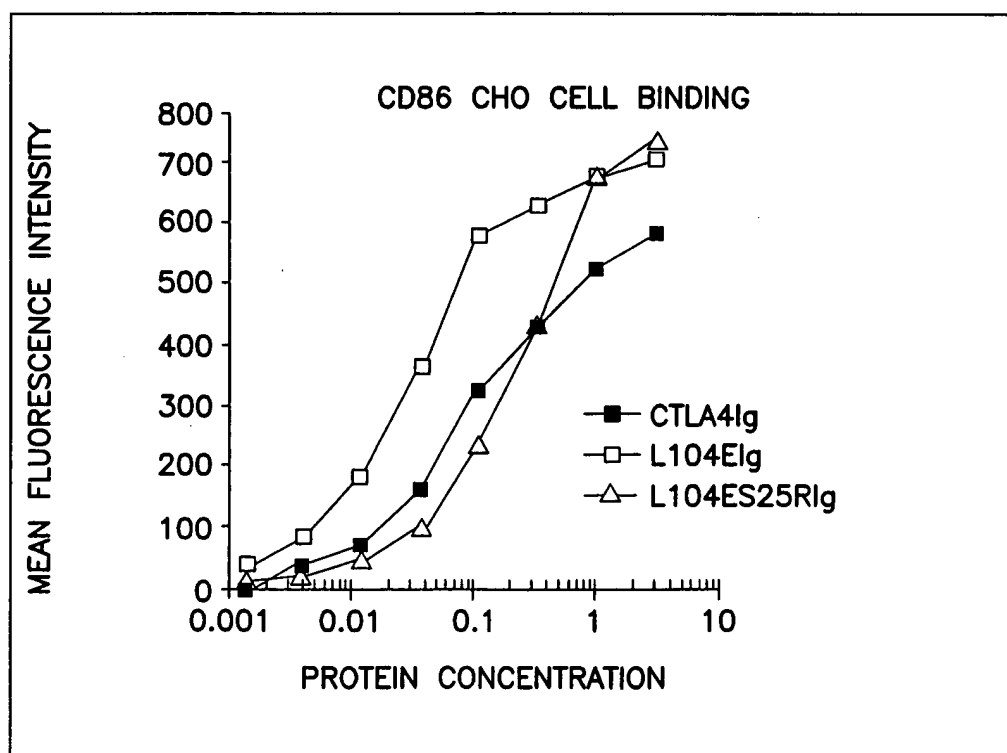


FIG. 37B



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